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Self-Diffusion of Carbon. (E) E. S. Golovina, V. S. Chaplyagina, and L. L. Kotova. 14, 705 (1970) [187, 558 (1969)]

CHEKAN, A. V.

General Waveguide Theory and the Ultimate Resolving Power of Multiple-Ray Spectrum Analyzers. (T) L. N. Deryugin and A. V. Chekan. 14, 123 (1969) [184, 807 (1969)]

CHEPELEVA, I. V.

Electron Paramagnetic Resonance of the Mn^{2+} and Gd^{3+} Ions in Chalcogenide Glasses $TlAsSe_2$ and $TlAsS_2$ in the 2 and 0.8 cm Ranges. (E) I. V. Chepeleva. 14, 356 (1969) [185, 1266 (1969)]

CHEREMISIN, F. G.

Structure of a Shock Wave in a Simple Monatomic Gas. (T) F. G. Cheremisin. 14, 91 (1969) [184, 790 (1969)]

CHEREPANEV, G. P.

Conditions at the End of a Crack. (T/E) L. A. Galin, Ya. B. Fridman, G. P. Cherepanov, E. M. Morozov, and V. Z. Parton. 14, 816 (1970) [187, 754 (1969)]

CHEREPANOV, V. I.

Parametrization Method in Perturbation Theory for a System with SR-Symmetry. (T) V. I. Cherepanov. 14, 134 (1969) [184, 820 (1969)]

CHEREZOV, N. K.

Proof of the Existence of Charged States of Krypton in the Matrices of Rubidium Halides by Means of the Mössbauer Method. (T/E) V. M. Krasnoperov, A. M. Murin, N. K. Cherezov, and I. A. Yutlandov. 14, 458 (1969) [186, 296 (1969)]

CHERNOUS'KO, F. L.

Differential Games with Information Delay. (T) F. L. Chernous'ko. 14, 952 (1970) [188, 766 (1969)]

CHIBISOV, M. I.

Resonance Transfer of Excitation in Collision of Heavy Atoms. (T) M. I. Chibisov. 14, 574 (1969) [186, 1063 (1969)]

CHICHAGOV, A. V.

The Crystal Structure of $NaNd_3[GeO_4]_2(OH)_2$. (E) A. V. Chichagov, V. S. Kovalenko, V. I. Ponomarev, and N. V. Belov. 14, 1037 (1970) [189, 88 (1969)]

CHICHEROV, V. M.

Scattering of Ions by Crystals as a Function of Initial Ion Energy. (E) V. A. Molchanov, V. A. Snisar', and V. M. Chicherov. 14, 43 (1969) [184, 74 (1969)]

CH'IN-HANG

The Crystalline Structure of Ramsayite $Na_2Ti_2Si_2O_9 = Na_2Ti_2O_3 \cdot [Si_2O_6]$. (E) Ch'in-hang, M. A. Simonov, and N. V. Belov. 14, 516 (1969) [186, 820 (1969)]

CHIZHIK, S. P.

The Structure of ZrO_2 with Admixtures of Sc. (E) N. S. Lidorenko, A. S. Kagan, L. A. Bykovskaya, T. V. Efimovskaya, L. A. Lyutsareva, S. P. Chizhik, and S. P. Shumanova. 14, 806 (1970) [187, 791 (1969)]

CHUZHKO, R. K.

Kinetics of the Release of Energy Stored in Deformed Uranium. (E/T) Yu. N. Golovanov, A. F. Sitnikov, A. A. Tsvetaev, and R. K. Chuzhko. 14, 1208 (1970) [189, 993 (1969)]

DASHEVSKAYA, E. I.

Vibrational Relaxation of Oscillators with Near Frequencies. (T) E. I. Dashevskaya. 14, 787 (1970) [187, 1025 (1969)]

DAS'KO, A. D.

Polarization of the Induced Radiation of Phthalimide Solutions. (E) A. N. Sevchenko, L. G. Pikulik, L. F. Gladchenko, and A. D. Das'ko. 14, 1003 (1970) [188, 1263 (1969)]

DAVYDOV, I. F.

Some Laws Governing Drop Carry Over. (T) A. M. Rozen, S. I. Golub, I. F. Davydov, and G. I. Gostinin. 14, 648 (1970) [187, 318 (1969)]

DAVYDOV, V. D.

Parhelic Halo on Mars. Brightness of the Parhelic Halo and Quantity of Ice Crystals in the Martian Atmosphere. (T/E) V. D. Davydov. 14, 1031 (1970) [189, 70 (1969)]

DEGTYAREV, L. M.

Calculating the Ionization Instability in Low-Temperature Magnetized Plasma. (T) E. P. Velikhov, L. M. Degtyarev, A. A. Samarskii, and A. P. Favorskii. 14, 68 (1969) [184, 578 (1969)]

DEKHTYAR', M. I.

Impossibility of Eliminating Complete Enumeration in Computing Functions from Their Diagrams. (T) M. I. Dekhtyar'. 14, 1146 (1970) [189, 748 (1969)]

DEMKIN, N. B.

Preliminary Displacement on Elastic Contact between Solids. (T) N. B. Demkin and I. V. Kragel'skii. 14, 603 (1969) [186, 812 (1969)]

DENISOV, M. M.

Induced Transitions of a Relativistic Electron in a Uniform Constant Magnetic Field. (T) M. M. Denisov. 14, 682 (1970) [187, 545 (1969)]

DENKER, B. I.

X-Ray Fluorescence of Rare-Earth Ions in $Y_3Al_5O_{12}$ Crystals. (E) Yu. K. Voron'ko, B. I. Denker, V. V. Osiko, A. M. Prokhorov, and M. I. Timoshechkin. 14, 998 (1970) [188, 1258 (1969)]

DERENDOVSKII, A. F.

Effect of Surface Tension on Cavitation Erosion. (E) B. R. Lazarenko, K. K. Shal'nev, I. I. Varga, D. Shebesht'en, L. Balint, M. K. Bologa, and A. F. Derendovskii. 14, 1025 (1970) [188, 1269 (1969)]

DERYUGIN, L. N.

General Waveguide Theory and the Ultimate Resolving Power of Multiple-Ray Spectrum Analyzers. (T) L. N. Deryugin and A. V. Chekan. 14, 123 (1969) [184, 807 (1969)]

DEVINGTAL', Yu. V.

Predicting the Types of Reaction Involved in the Formation of Metallic Phases and Estimating Their Range of Homogeneity by Means of an Electronic Computer. (T) E. M. Savitskii, Yu. V. Devingtal', and V. B. Gribulya. 14, 279 (1969) [185, 561 (1969)]

DIANOV, E. M.

Measurement of the Quantum Conversion Efficiency in Neodymium Glass. (E) E. M. Dianov, B. V. Ershov, Yu. P. Pimenov, and V. B. Fedorov. 14, 53 (1969) [184, 321 (1969)]

DIKUSAR, N. D.

Automatic Cathode-Ray Tube Scanner. (E) V. F. Borisovskii, N. D. Dikusar, V. V. Ermolaev, A. D. Zlobin, I. N. Kukhtina, I. I. Skryl', A. I. Filippov, V. N. Shigaev, and V. N. Shkundenkov. 14, 256 (1969) [185, 306 (1969)]

DISTLER, G. I.

Electrical Structure of Boundary Layers. (T) G. I. Distler. 14, 455 (1969) [186, 293 (1969)]

Oriented Crystallization on High-Polymer Boundary Layers, Copying the Electric Relief of the Crystalline-Substrate Surface by Virtue of the Electret Mechanism. (E) G. I. Distler and S. A. Kobzareva. 14, 935 (1970) [188, 811 (1969)]

DMITRIEV, V. D.

Effect of Neutron Irradiation on Grain Growth of Uranium during Subsequent Annealing. (E) V. D. Dmitriev and Sh. Sh. Ibragimov. 14, 1123 (1970) [189, 305 (1969)]

DOBRIKOV, A. A.

Study of Diffusion of Na^{22} and Ag^{110} on a Mica Surface, and the Criterion for the Validity of the Asymptotic Solutions to the Surface Diffusion Problem. (E/T) V. I. Solunskii and A. A. Dobrikov. 14, 497 (1969) [186, 568 (1969)]

DOBRUSHINA, I. A.

Vibration-Condensation Kinetics of Tungsten Powder. (E) I. A. Dobrushina, M. R. Spasskii, I. G. Shatalova, and E. D. Shchukin. 14, 1125 (1970) [189, 525 (1969)]

An Energy Parameter for Vibrocompaction of Powders. (T/E) M. R. Spasskii, I. A. Dobrushina, I. G. Shatalova, E. D. Shchukin, and P. A. Rebinder. 14, 1205 (1970) [189, 767 (1969)]

DOBRYAKOV, S. N.

Variational Analysis of Isotropic EPR Spectra in Fourier Spectra. (T) S. N. Dobryakov and Ya. S. Lebedev. 14, 351 (1969) [185, 1028 (1969)]

DONETSKIKH, V. I.

Reflection Spectra of Aluminum Nitride. (E/T) V. I. Donetskikh, A. A. Pletyushkin, Yu. V. Popov, N. G. Slavina, and V. V. Sobolev. 14, 1203 (1970) [189, 764 (1969)]

DREMIN, A. N.

Explosion MHD Generator with Superconducting Magnet System. (E) V. A. Kirillin, V. A. Al'tov, E. I. Asinovskii, A. N. Dremin, F. I. Dubovitskii, V. B. Zenkevich, Yu. A. Kuznetsov, E. F. Lebdev, S. D. Savrov, V. V. Sychev, and A. E. Sheindlin. 14, 266 (1969) [185, 316 (1969)]

Destruction of Color Centers of NaCl Single Crystals by Shock Compression. (E) O. B. Yakusheva, V. V. Yakushev, and A. N. Dremin. 14, 1189 (1970) [189, 991 (1969)]

DROZHBIN, Yu. A.

Investigation of Optical Breakdown in Air, Induced by Ultrashort Pulses, Using Moving Image Photography and an Image Converter. (E) B. Z. Gorbenko, Yu. A. Drozhbin, S. D. Kaitmazov, A. A. Medvedev, A. M. Prokhorov, and A. M. Tolmachov. 14, 764 (1970) [187, 772 (1969)]

DUBNER, V. M.

A Nonstationary Problem of Thermal Conductivity in a Two-Layer Cylinder. (T) A. S. Umanskii, V. M. Dubner, and Yu. A. Gorshkov. 14, 428 (1969) [186, 66 (1969)]

DUBOVITSKII, F. I.

Explosion MHD Generator with Superconducting Magnet System. (E) V. A. Kirillin, V. A. Al'tov, E. I. Asinovskii, A. N. Dremin, F. I. Dubovitskii, V. B. Zenkevich, Yu. A. Kuznetsov, E. F. Lebdev, S. D. Savrov, V. V. Sychev, and A. E. Sheindlin. 14, 266 (1969) [185, 316 (1969)]

DUBROVSKAYA, N. S.

Charge Accumulation in Epitaxial p-n Structures of Gallium Arsenide. (E) N. S. Dubrovskaya, B. A. Krasyuk, S. S. Meskin, N. F. Nedel'skii, V. N. Ravich, and V. I. Sobolev. 14, 664 (1970) [187, 298 (1969)]

DUDENKOV, Yu. A.

Absorption Spectra of Diamonds of Intermediate Type. (E) Yu. A. Klyuev, A. N. Rykov, Yu. A. Dudenkov, and V. M. Zubkov. 14, 1133 (1970) [189, 771 (1969)]

DUDKIN, L. D.

Effect of Tunneling on the Efficiency of Thermoelectric Devices. (T) N. S. Lidorenko, V. A. Andriyako, L. D. Dudkin, É. L. Nagaev, and O. M. Narva. 14, 591 (1969) [186, 1295 (1969)]

DUKHOVSKII, E. A.

Anomalous Decrease in Friction when Polyethylene Is Bombarded in Vacuo with Certain Atoms and Molecules. (E) E. A. Dukhovskii, V. S. Onishchenko, A. N. Ponomarev, A. A. Silin, and V. L. Tal'roze. 14, 1218 (1970) [189, 1211 (1969)]

DUMAN, E. L.

Resonant Charge Transfer of Ions to Group II Atoms of the Mendeleev Table. (T) E. L. Duman. 14, 767 (1970) [187, 775 (1969)]

DVORYANKIN, V. F.

Heteroepitaxial Growth of Cadmium Sulfide Films. (E) S. A. Aitkhozhin, G. B. Bokii, V. F. Dvoryankin, I. M. Kotelyanskii, and V. V. Panteleev. 14, 1018 (1970) [188, 1032 (1969)]

DYSHKO, A. L.

Self-Focusing High-Intensity Light Beams. (T) A. L. Dyshko, V. N. Lugovoi, and A. M. Prokhorov. 14, 976 (1970) [188, 792 (1969)]

DZHIBUTI, M. V.

Model of a Three-Dimensionally Modulated Complex for Explaining X-Ray Diffraction Patterns with Satellites. (T/E) Yu. D. Tyapkin, M. N. Georgiev, and M. V. Dzhibuti. 14, 409 (1969) [186, 316 (1969)]

EDNERAL, A. F.

Study of the Influence of Cobalt on the Solubility of Molybdenum in Iron-Nickel Martensite. (E) A. F. Edneral, O. P. Zhukov, and M. D. Perkas. 14, 152 (1969) [184, 828 (1969)]

EFIMOVSKAYA, T. V.
The Structure of ZrO_2 with Admixtures of Sc. (E) N. S. Lidorenko, A. S. Kagan, L. A. Bykovskaya, T. V. Efimovskaya, L. A. Lyutsareva, S. P. Chizhik, and S. P. Shumanova. 14, 806 (1970) [187, 791 (1969)]

ÉLLERT, G. V.
Energy Exchange between Active Centers in Glass. (E) N. S. Belokrinitskii, M. E. Zhabotinskii, A. D. Manuil'skii, Yu. P. Rudnitskii, M. S. Soskin, V. V. Tsapkin, and G. V. Éllert. 14, 276 (1969) [185, 557 (1969)]

ERMOLAEV, V. V.
Automatic Cathode-Ray Tube Scanner. (E) V. F. Borisovskii, N. D. Dikusar, V. V. Ermolaev, A. D. Zlobin, I. N. Kukhtina, I. I. Skryl', A. I. Filippov, V. N. Shigaev, and V. N. Shkundenkov. 14, 256 (1969) [185, 306 (1969)]

EROFEEV, V. N.
Effect of Impurities on the Surmounting of High Peierls Barriers by Dislocations. (E/T) V. N. Erofeev, V. I. Nikitenko, and V. B. Osvenskii. 14, 1108 (1970) [189, 513 (1969)]

ERSHOV, B. V.
Measurement of the Quantum Conversion Efficiency in Neodymium Glass. (E) E. M. Dianov, B. V. Ershov, Yu. P. Pimenov, and V. B. Fedorov. 14, 53 (1969) [184, 321 (1969)]

ERSHOV, I. V.
Experimental Investigation of Nonequilibrium Processes behind a Shock Wave in Air and Nitrogen by the Shadow Method. (E) L. A. Vsil'ev, I. V. Ershov, and S. S. Semenov. 14, 553 (1969) [186, 1041 (1969)]
Pulsed Lasers as Light Sources for Shadow and Interference Instruments. (E) I. V. Ershov, A. P. Ovechkin, B. T. Fedyushin, A. I. Kharitonov, and Yu. A. Tsvetaev. 14, 1067 (1970) [189, 277 (1969)]

EVDOKIMOV, I. N.
Experimental Test of the Chain Model for the Scattering of Ions by Crystals. (T/E) I. N. Evdokimov, E. S. Mashkova, and V. A. Molchanov. 14, 467 (1969) [186, 549 (1969)]

EVDOKIMOV, V. D.
Manifestation of the Adsorption-Induced Loss of Strength Associated with Reversing Sliding Friction. (E) V. D. Evdokimov, and P. A. Rebinder. 14, 386 (1969) [185, 1270 (1969)]
Effect of Reversible Friction on Dislocation and Vacancy Density in the Surface Layer of a Metal. (E) V. D. Evdokimov and G. E. Movsesov. 14, 491 (1969) [186, 302 (1969)]

EVSEEV, A. M.
Calculation of Ground Energy Level of Helium by Means of Trajectory Integrals. (T) A. M. Evseev. 14, 1191 (1970) [189, 1197 (1969)]

FADIN, V. P.
On the Influence of Alloying a Ni_3Mn Alloy with a Third 3d-Transition Element on Ordering Kinetics. (E) V. E. Panin, V. V. Prushinskii, V. P. Fadin, and L. I. Novak. 14, 1119 (1970) [189, 84 (1969)]

FAINER, U. M.
Quadrupole and Octupole One-Phonon States of Nuclei in the Range $174 \le A \le 188$. (T) L. A. Malov, V. G. Solov'ev, and U. M. Fainer. 14, 461 (1969) [186, 299 (1969)]

FANCHENKO, S. D.
Observation of Ionic Sound in a Toroidally Shaped Plasma during Turbulent Heating. (E) N. F. Perepelkin and S. D. Fanchenko. 14, 1078 (1970) [189, 288 (1969)]

FAVORSKII, A. P.
Calculating the Ionization Instability in Low-Temperature Magnetized Plasma. (T) E. P. Velikhov, L. M. Degtyarev, A. A. Smarskii, and A. P. Favorskii. 14, 68 (1969) [184, 578 (1969)]

FEDCHENKO, V. S.
Rebinder Effect in a Hydrogen Atmosphere. (E) G. V. Karpenko, I. I. Vasilenko, M. G. Khitarishvili, and V. S. Fedchenko. 14, 380 (1969) [185, 1034 (1969)]

FEDOROV, S. I.
Octupole States of Even-Even Nuclides in the Range $150 \le A \le 176$. (T/E) L. A. Malov, V. G. Solov'ev, and S. I. Fedorov. 14, 1186 (1970) [189, 987 (1969)]

FEDOROV, V. B.
Measurement of the Quantum Conversion Efficiency in Neodymium Glass. (E) E. M. Dianov, B. V. Ershov, Yu. P. Pimenov, and V. B. Fedorov. 14, 53 (1969) [184, 321 (1969)]

FEDOROVA, L. V.
Limits of Applicability of the Buger Law in Water Mists (Clouds) in Relation to the Angular Aperture of the Receiver and the Parameters of the Laser Beam. (E) M. A. Kolosov, A. V. Sokolov, L. V. Fedorova, and R. A. Shirei. 14, 800 (1970) [187, 1264 (1969)]

FEDYUSHIN, B. T.
Pulsed Lasers as Light Sources for Shadow and Interference Instruments. (E) I. V. Ershov, A. P. Ovechkin, B. T. Fedyushin, A. I. Kharitonov, and Yu. A. Tsvetaev. 14, 1067 (1970) [189, 277 (1969)]

FEL'D, Ya. N.
On the Reduction of a Certain Class of Integral Equations of the First Kind to Equations of the Second Kind. (T) Ya. N. Fel'd. 14, 751 (1970) [187, 761 (1969)]

FIKHMANAS, R. F.
Variational Estimate of Upper and Lower Bounds of the Coefficients of Polarizability in the Theory of Pinhole Diffraction. (T) R. F. Fikhmanas and P. Sh. Fridberg. 14, 1155 (1970) [189, 969 (1969)]

FILIPPOV, A. I.
Automatic Cathode-Ray Tube Scanner. (E) V. F. Borisovskii, N. D. Dikusar, V. V. Ermolaev, A. D. Zlobin, I. N. Kukhtina, I. I. Skryl', A. I. Filippov, V. N. Shigaev, and V. N. Shkundenkov. 14, 256 (1969) [185, 306 (1969)]

FILONENKO, N. E.
Sectorial Growth of Cubic Boron Nitride Crystals. (E) N. E. Filonenko, T. P. Nikitina, and N. M. Kamentseva. 14, 633 (1970) [187, 569 (1969)]

FILONENKO, N. N.
Stochastic "Heating" of a Nonlinear Wave. (T) N. N. Filonenko. 14, 1201 (1970) [189, 1208 (1969)]

FIL'SHTEINSKII, L. A.
Equivalent Stiffness of a Doubly-Periodic Grating Reinforced with Elastic Rings. (T) É. I. Grigolyuk and L. A. Fil'shtinskii. 14, 822 (1970) [187, 1254 (1969)]

FINKEL'SHTEIN, G. B.
Kinetics and Mechanism of the Breakdown of Graphitic Materials during Intense Abrasion. (E) L. A. Plutalova, G. B. Finkel'shtein, Z. A. Panyusheva, and L. P. Grigorenko. 14, 269 (1969) [185, 320 (1969)]

FIRSOV, O. B.
Dependence of Sputtering of a Target on the Angle of Incidence of the Bombarding Particles. (T) O. B. Firsov. 14, 1092 (1970) [189, 302 (1969)]

FLEROV, G. N.
The Search for Far Transuranium Elements in Ferromanganese Nodules. (E) O. Otgonsuren, V. P. Perelygin, and G. N. Flerov. 14, 1194 (1970) [189, 1200 (1969)]

FRANK-KAMENETSKII, D. A.
Excitation of Nonpotential Oscillations in a Solid-State Plasma. (T) A. A. Ivanov, E. Z. Meilikhov, V. V. Parail, and D. A. Frank-Kamenetskii. 14, 652 (1970) [187, 68 (1969)]

FRIDBERG, P. Sh.

Variational Estimate of Upper and Lower Bounds of the Coefficients of Polarizability in the Theory of Pinhole Diffraction. (T) R. F. Fikhmanas and P. Sh. Fridberg. 14, 1155 (1970) [189, 969 (1969)]

FRIDMAN, Ya. B.

Conditions at the End of a Crack. (T/E) L. A. Galin, Ya. B. Fridman, G. P. Cherepanov, E. M. Morozov, and V. Z. Parton. 14, 816 (1970) [187, 754 (1969)]

GABASOV, R.

Application of the Principle of the Maximum to the Calculation of Optimum Equations of Discrete Systems. (T) R. Gabasov and F. M. Kirillova. 14, 1152 (1970) [189, 963 (1969)]

GALEEV, A. A.

Paradox in the Diffusion of Plasma in Toroidal Magnetic Traps. (T) R. Z. Sagdeev and A. A. Galeev, 14, 1198 (1970) [189, 1204 (1969)]

GALIN, L. A.

Conditions at the End of a Crack. (T/E) L. A. Galin, Ya. B. Fridman, G. P. Cherepanov, E. M. Morozov, and V. Z. Parton. 14, 816 (1970) [187, 754 (1969)]

GALKIN, A. A.

On the Decrease in the Luminescence Decay Time of Europium Benzoylacetonate under the Influence of Hydrostatic Pressure. (E) V. A. Voloshin, A. A. Galkin, and A. I. Savutskii. 14, 1106 (1970) [189, 511 (1969)]

GANIEV, R. M.

Crystal Structure of Calcium Chondrodite $Ca_5[SiO_4]_2(OH)_2 = Ca(OH)_2 \cdot Ca_2SiO_4$. (E) R. M. Ganiev, Yu. A. Kharitonov, V. V. Ilyukhin, and N. V. Belov. 14, 946 (1970) [188, 1281 (1969)]

GARASHINA, L. S.

New Data on the Structure of CaF_2-TRF_3 Solid Solutions. (E) V. B. Aleksandrov and L. S. Garashina. 14, 1040 (1970) [189, 307 (1969)]

GASILOVA, N. S.

Formation of the $N^*(3, 3)$-Isobar in the Reaction $\pi^-p \to \pi^+\pi^-n$. (T) A. P. Komar, M. M. Makarov, V. V. Sarantsev, and N. S. Gasilova. 14, 74 (1969) [184, 584 (1969)]

GAVRIKOV, V. K.

Forced Scattering on Surface Waves. (T) V. K. Gavrikov, A. V. Kats, and V. M. Kontorovich. 14, 564 (1969) [186, 1052 (1969)]

GAVRILOV, L. R.

Effect of Ultrasound upon the Formation of High-Energy Particle Tracks in Liquid-Hydrogen Bubble Chambers. (E) V. A. Akulichev, L. R. Gavrilov, V. G. Grebinnik, V. A. Zhukov, G. Liebman, A. P. Manych, Yu. I. Rudin, L. D. Rozenbarg, and G. I. Selivanov. 14, 1173 (1970) [189, 973 (1969)]

GEL'FREIKH, G. B.

A Reflecting Radio Telescope with 15" Resolving Power. (E) S. É. Khaikin, N. L. Kaidanovskii, Yu. N. Pariiskii, O. N. Shivris, G. B. Gel'freikh, and A. A. Stotskii. 14, 291 (1969) [185, 775 (1969)]

GENKIN, A. L.

Structure of a Flow with Periodic Variation of Momentum. (T) L. A. Virulis, A. L. Genkin, and L. P. Yarin. 14, 192 (1969) [185, 532 (1969)]

GEORGIEV, M. N.

Model of a Three-Dimensionally Modulated Complex for Explaining X-Ray Diffraction Patterns with Satellites. (T/E) Yu. D. Tyapkin, M. N. Georgiev, and M. V. Dzhibuti. 14, 409 (1969) [186, 316 (1969)]

GEORGIEVA, I. Ya.

Isothermal and Athermal Martensite Transformation in an Iron-Nickel-Molybdenum Alloy. (E) I. Ya. Georgieva and I. I. Nikitina. 14, 485 (1969) [186, 85 (1969)]

GERTSENSHTEIN, S. Ya.

On the Convergence of the Rayleigh Method. (T) S. Ya. Gertsenshtein. 14, 746 (1970) [187, 1012 (1969)]

GETLING, A. V.

Solution to One Class of MHD Problems with Increased Magnetic-Field Strength. (T) A. V. Getling. 14, 666 (1970) [187, 301 (1969)]

GINDIN, I. A.

On the Effect of Softening in Low-Temperature Creep of Lead in the Superconducting State. (E) I. A. Gindin, B. G. Lazarev, Ya. D. Starodubov, and V. P. Lebedev. 14, 1011 (1970) [188, 803 (1969)]

GIORGADZE, N. P.

On the Quantum-Statistical Theory of Spin Diffusion. (T) L. L. Buishvili and N. P. Giorgadze. 14, 1104 (1970) [189, 508 (1969)]

GLADCHENKO, L. F.

Polarization of the Induced Radiation of Phthalimide Solutions. (E) A. N. Sevchenko, L. G. Pikulik, L. F. Gladchenko, and A. D. Das'ko. 14, 1003 (1970) [188, 1263 (1969)]

GNATOVSKII, A. V.

Holographic Method of Converting Coherent Light Fields. (E/T) M. D. Bondarenko, A. V. Gnatovskii, and M. S. Soskii. 14, 675 (1970) [187, 538 (1969)]

GOGOLEV, V. M.

Construction of Approximate Shock Adiabats of Solids in the Hydrodynamic Region. (T/E) S. V. Bobrovskii, V. M. Gogolev, and B. V. Zamyshlyaev. 14, 65 (1969) [184, 574 (1969)]

GOL'DENBERG, A. B.

Production of Alkali-Halide Phosphors by Surface Treatment. (E) A. B. Gol'denberg, S. I. Golub, and E. A. Nesterovskaya. 14, 670 (1970) [187, 305 (1969)]

GOL'DSHTIK, M. A.

Calculation of the Wall Turbulence Constant. (T) M. A. Gol'dshtik and S. S. Kutateladze. 14, 194 (1969) [185, 535 (1969)]

Determination of a Law of Turbulent Viscosity in a Flow Core on the Basis of a Principle of Maximum Stability. (T/E) M. A. Gol'dshtik and V. N. Shtern. 14, 955 (1970) [188, 772 (1969)]

GOLIK, V. R.

A 112 kOe Superconducting Laboratory Solenoid of Deformable Alloy Wire. (E) B. G. Lazarev, L. S. Lazareva, V. R. Golik, and S. I. Goridov. 14, 82 (1969) [184, 89 (1969)]

GOLOVACHEV, V. P.

Crystal Structure of $3Mg(OCH_3)_2 \cdot MgCl_2 \cdot 10CH_3OH$. (E) R. I. Bochkova, V. P. Golovachev, E. P. Turevskaya, and N. V. Belov. 14, 1143 (1970) [189, 1246 (1969)]

GOLOVANOV, Yu. N.

Kinetics of the Release of Energy Stored in Deformed Uranium. (E/T) Yu. N. Golovanov, A. F. Sitnikov, A. A. Tsvetaev, and R. K. Chuzhko. 14, 1208 (1970) [189, 993 (1969)]

GOLOVCHAN, V. T.

Diffraction of Elastic Waves by an Infinite Row of Circular Cylinders. (T) V. T. Golovchan and A. N. Guz'. 14, 503 (1969) [186, 286 (1969)]

Three-Dimensional Doubly-Periodic Problems of Elasticity Theory. (T) G. N. Savin, A. N. Guz', and V. T. Golovchan. 14, 819 (1970) [187, 1016 (1969)]

GOLOVINA, E. S.

Self-Diffusion of Carbon. (E) E. S. Golovina, V. S. Chaplygina, and L. L. Kotova. 14, 705 (1970) [187, 558 (1969)]

GOLUB, S. I.

Some Laws Governing Drop Carry Over. (T) A. M. Rozen, S. I. Golub, I. F. Davydov, and G. I. Gostinin. 14, 648 (1970) [187, 318 (1969)]

Production of Alkali-Halide Phosphors by Surface Treatment. (E) A. B. Gol'denberg, S. I. Golub, and E. A. Nesterovskaya. 14, 670 (1970) [187, 305 (1969)]

GORBENKO, B. Z.

Investigation of Optical Breakdown in Air, Induced by Ultrashort Pulses, Using Moving Image Photography and an Image Converter. (E) B. Z. Gorbenko, Yu. A. Drozhbin, S. D. Kaitmazov, A. A. Medvedev, A. M. Prokhorov, and A. M. Tolmachov. 14, 764 (1970) [187, 772 (1969)]

GORBUNOVA, N. I.

Experimental Investigation of the Enthalpy of the Chemically Reacting System $N_2O_4 \rightleftharpoons 2NO_2 \rightleftharpoons 2NO + O_2$. (E) A. E. Sheindlin, N. I. Gorbunova, and Yu. A. Sarumov. 14, 523 (1969) [186, 817 (1969)]

GORELIK, V. Yu.

On the Frequency and Time Characteristics of Systems with Varying Parameters. (T) V. A. Taft and V. Yu. Gorelik. 14, 743 (1970) [187, 1251 (1969)]

GORID'KO, N. Ya.

The Photocapillary Effect for Germanium. (E) A. I. Bykhovskii, A. Yu. Proleskovskaya, N. N. Novikov, and N. Ya. Gorid'ko. 14, 79 (1969) [184, 85 (1969)]

GORIDOV, S. I.

A 112 kOe Superconducting Laboratory Solenoid of Deformable Alloy Wire. (E) B. G. Lazarev, L. S. Lazareva, V. R. Golik, and S. I. Goridov. 14, 82 (1969) [184, 89 (1969)]

GORSHKOV, Yu. A.

A Nonstationary Problem of Thermal Conductivity in a Two-Layer Cylinder. (T) A. S. Umanskii, V. M. Dubner, and Yu. A. Gorshkov. 14, 428 (1969) [186, 66 (1969)]

GORYUNOVA, N. A.

The Existence of a Diamond-Like Semiconductor in a Glassy State. (E) N. A. Goryunova, L. B. Zlatkin, Yu. F. Markov, and A. I. Stekhanov. 14, 72 (1969) [184, 582 (1969)]

GOSTININ, G. I.

Some Laws Governing Drop Carry Over. (T) A. M. Rozen, S. I. Golub, I. F. Davydov, and G. I. Gostinin. 14, 648 (1970) [187, 318 (1969)]

GOZDEK, V. S.

Reaction of the Ground on a Vibrating Rolling Wheel with an Elastic Tire. (T) V. S. Gozdek. 14, 536 (1969) [186, 1031 (1969)]

GREBINNIK, V. G.

Effect of Ultrasound upon the Formation of High-Energy Particle Tracks in Liquid-Hydrogen Bubble Chambers. (E) V. A. Akulichev, L. R. Gavrilov, V. G. Grebinnik, V. A. Zhukov, G. Liebman, A. P. Manych, Yu. I. Rudin, L. D. Rozenberg, and G. I. Selivanov. 14, 1173 (1970) [189, 973 (1969)]

GRIB, A. A.

Elementary Particle Theory and the Noninvariant Vacuum. (T) A. A. Grib. 14, 784 (1970) [187, 1022 (1969)]

GRIBULYA, V. B.

Predicting the Types of Reaction Involved in the Formation of Metallic Phases and Estimating Their Range of Homogeneity by Means of an Electronic Computer. (T) E. M. Savitskii, Yu. V. Devingtal', and V. B. Gribulya. 14, 279 (1969) [185, 561 (1969)]

GRIGOLYUK, É. I.

Equivalent Stiffness of a Doubly-Periodic Grating Reinforced with Elastic Rings. (T) É. I. Grigolyuk and L. A. Fil'shtinskii. 14, 822 (1970) [186, 1254 (1969)]

GRIGORENKO, L. P.

Kinetics and Mechanism of the Breakdown of Graphitic Materials during Intense Abrasion. (E) L. A. Plutalova, G. B. Finkel'shtein, Z. A. Panyusheva, and L. P. Grigorenko. 14, 269 (1969) [185, 320 (1969)]

GUSEINZADE, M. A.

The Law of Gas Filtration in a Porous Medium. (E) A. Kh. Mirzadzhanzade, M. A. Guseinzade, A. Sh. Asadov, and G. M. Iskenderov. 14, 99 (1969) [184, 794 (1969)]

GUSEV, V. N.

Shadow Electron-Optical Moiré Patterns Produced by Electrical and Magnetic Microfields. (E) V. N. Gusev and B. A. Krasyuk. 14, 699 (1970) [187, 311 (1969)]

GUSEVA, L. N.

The Martensitic Phase with Face-Centered Cubic Lattice in Titanium Alloy Containing 5-9% Iron. (E) L. N. Guseva, L. A. Petrova, and I. A. Ogloblina. 14, 367 (1969) [185, 799 (1969)]

GUTNIKOVA, G. M.

Calculation of the Time Necessary for the Formation of an Atmosphere of Impurity Atoms around a Boundary Dislocation. (T) G. M. Gutnikova and B. Ya. Lyubov. 14, 16 (1969) [184, 1095 (1969)]

GUZ', A. N.

Diffraction of Elastic Waves by an Infinite Row of Circular Cylinders. (T) V. T. Golovchan and A. N. Guz'. 14, 503 (1969) [186, 286 (1969)]

Three-Dimensional Doubly-Periodic Problems of Elasticity Theory. (T) G. N. Savin, A. N. Guz', and V. T. Golovchan. 14, 819 (1970) [187, 1016 (1969)]

IBRAGIMOV, Sh. Sh.

Effect of Neutron Irradiation on Grain Growth of Uranium during Subsequent Annealing. (E) V. D. Dmitriev and Sh. Sh. Ibragimov. 14, 1123 (1970) [189, 305 (1969)]

IGNATOV, D. V.

Texture of Acicular Crystals and Crystallographic Orientation of Dendrites in Molybdenum Ingots. (E/T) N. V. Ageev, D. V. Ignatov, and M. M. Kantor. 14, 158 (1969) [184, 1088 (1969)]

IL'INA, V. A.

Ordering Processes in Neutron-Irradiated Martensite. (E) V. K. Kritskaya and V. A. Il'ina. 14, 389 (1969) [185, 1273 (1969)]

Effect of Electron Irradiation on the State of the Carbon in Martensite. (E) V. K. Kritskaya, V. A. Il'ina, and L. N. Bystrov. 14, 488 (1969) [186, 89 (1969)]

IL'INSKII, D. Ya.

Construction of Automatic Machines and Their Efficiency. (T) I. I. Artobolevskii, D. Ya. Il'inskii, and I. I. Kapustin. 14, 205 (1969) [185, 282 (1969)]

Optimum Synthesis of Automatic Machines. (T) I. I. Artobolevskii, D. Ya. Il'inskii, and I. I. Kapustin. 14, 209 (1969) [185, 528 (1969)]

ILYUKHIN, V. V.

Crystal Structure of Tundrite. (E) N. G. Shumyatskaya, V. V. Ilyukhin, A. A. Voronkov, and N. V. Belov. 14, 304 (1969) [185, 1289 (1969)]

Crystal Structure of Calcium Chondrodite $Ca_5[SiO_4]_2(OH)_2 = Ca(OH)_2 \cdot Ca_2SiO_4$. (E) R. M. Ganiev, Yu. A. Kharitonov, V. V. Ilyukhin, and N. V. Belov. 14, 946 (1970) [188, 1281 (1969)]

Interpretation of a Vector System by Using One Multiple Peak. (T) É. A. Kuz'min, V. V. Ilyukhin, and N. V. Belov. 14, 1136 (1970) [189, 774 (1969)]

IOGANSEN, L. V.

Electronic Structure of Cyclic Molecules. (T) L. V. Iogansen. 14, 1071 (1970) [189, 281 (1969)]

Search for Low-Energy Collective Electron Excitations in the Benzene Ring. (E) L. V. Iogansen and F. A. Uvarov. 14, 1111 (1970) [189, 516 (1969)]

ISAKOVA, N. B.

Rate of Propagation of Ultrasound in Argon at Pressures up to 4 kbars and Temperatures from 25 to 200°C. (E) L. L. Pitaevskaya, A. V. Bilevich, and N. B. Isakova. 14, 150 (1969) [184, 1315 (1969)]

ISKENDEROV, G. M.

The Law of Gas Filtration in a Porous Medium. (E) A. Kh. Mirzadzhanzade, M. A. Guseinzade, A. Sh. Asadov, and G. M. Iskenderov. 14, 99 (1969) [184, 794 (1969)]

ITKIN, V. P.

Heat of Ordering for Ni_2Cr Alloy. (E) E. Z. Vintaikin, V. P. Itkin, B. M. Mogutnov, and G. G. Urushadze. 14, 263 (1969) [185, 313 (1969)]

IVANOV, A. A.

Transport of Heat in a Plasma along a Magnetic Field (Replacement Wave). (E/T) A. A. Ivanov, L. L. Kozorovitskii, and V. L. Rusanov. 14, 126 (1969) [184, 811 (1969)]

Excitation of Nonpotential Oscillations in a Solid-State Plasma. (T) A. A. Ivanov, E. Z. Meilikhov, V. V. Parail, and D. A. Frank-Kamenetskii. 14, 652 (1970) [187, 68 (1969)]

IVANOV, L. I.

Non-Stationary Radiation Diffusion in Metals. (T/E) L. N. Bystrov, L. I. Ivanov, and Yu. M. Platov. 14, 259 (1969) [185, 309 (1969)]

IVANOV, S. S.

Equations Arising in the Summation of Perturbation-Theory Series for the Scattering Matrix. (T) S. S. Ivanov and D. Ya. Petrina. 14, 958 (1970) [188, 776 (1969)]

IVANOV-MUROMSKII, K. A.

Automatic Prognosis of the Course of Diseases by Means of a Digital Computer. (T) S. Ya. Zaslavskii and K. A. Ivanov-Muromskii. 14, 638 (1970) [187, 528 (1969)]

IZMAILOV, V. A.

On the Microinhomogeneity of Pig Iron. (E) A. M. Samarin and V. A. Izmailov. 14, 392 (1969) [185, 1276 (1969)]

IZOTOVA, O. E.

Optical and Generation Properties of Mixed CdF_2-YF_3 Crystals Activated with Nd^{3+} Ions. (E) Kh. S. Bagdasarov, O. E. Izotova, A. A. Kaminskii, L. Li, and B. P. Sobolev. 14, 939 (1970) [188, 1042 (1969)]

KABALKINA, S. S.

Crystal Structure of Tin Oxide at High Pressure. (E) N. R. Serebryanaya, S. S. Kabalkina, and L. F. Vereshchagin. 14, 672 (1970) [187, 307 (1969)]

KADIEVSKII, G. M.

The Effect of Intramolecular Orientational Motion on Magnetic Relaxation in Solids. (E/T) M. R. Zaripov, M. M. Bil'danov, and G. M. Kadievskii. 14, 147 (1969) [184, 1312 (1969)]

KADOMTSEV, B. B.

Dissipative, Trapped-Particle Instability in a Dense Plasma. (T) B. B. Kadomtsev and O. P. Pogutse. 14, 470 (1969) [186, 553 (1969)]

KADYROV, D. I.

Kinetics of Paramagnetic Magnetization. (T) D. I. Kadyrov and I. G. Shaposhnikov. 14, 1058 (1970) [189, 77 (1969)]

Perturbation Theory for Spin Green's Functions. (T) D. I. Kadyrov. 14, 1170 (1970) [189, 760 (1969)]

KAGAN, A. S.

The Structure of ZrO_2 with Admixtures of Sc. (E) N. S. Lidorenko, A. S. Kagan, L. A. Bykovskaya, T. V. Efimovskaya, L. A. Lyutsareva, S. P. Chizhik, and S. P. Shumanova. 14, 806 (1970) [187, 791 (1969)]

KAIDANOVSKII, N. L.

A Reflecting Radio Telescope with 15" Resolving Power. (E) S. É. Khaikin, N. L. Kaidanovskii, Yu. N. Pariiskii, O. N. Shivris, G. B. Gel'freikh, and A. A. Stotskii. 14, 291 (1969) [185, 775 (1969)]

KAITMAZOV, S. D.

Investigation of Optical Breakdown in Air, Induced by Ultrashort Pulse, Using Moving Image Photography and an Image Converter. (E) B. Z. Gorbenko, Yu. A. Drozhbin, S. D. Kaitmazov, A. A. Medvedev, A. M. Prokhorov, and A. M. Tolmachov. 14, 764 (1970) [187, 772 (1969)]

KALASHNIKOV, V. P.

A Nonequilibrium Statistical Operator in the Kinetics of Irreversible Processes with Small Energy Transfer. (T) V. P. Kalashnikov. 14, 542 (1969) [186, 803 (1969)]

KALENOV, O. S.

Justification of the Form of the Equation of State Given in Terms of Elementary Functions. (T) A. A. Vasserman, Ya. Z. Kazavchinskii, and O. S. Kalenov. 14, 588 (1969) [186, 1291 (1969)]

KALININ, Yu. G.

Observation of Plasma Noise during Turbulent Heating. (E) Yu. G. Kalinin, D. N. Lin, L. I. Rudakov, V. D. Ryutov, and V. A. Skoryupin. 14, 1074 (1970) [189, 284 (1969)]

KALUGINA, L. I.

Properties of Cadmium Telluride p-n Junctions. (E) P. S. Kireev, L. I. Kalugina, and A. V. Vanyukov. 14, 56 (1969) [184, 324 (1969)]

KAMACH, Yu. É.

Double-Beam Reflection in Crystals and Its Use in Electro-optical Modulators. (T/E) Yu. É. Kamach, E. N. Kozlovskii, V. M. Ovchinnikov, and V. A. Shamburov. 14, 301 (1969) [185, 1285 (1969)]

KAMENTSEVA, N. M.

Sectorial Growth of Cubic Boron Nitride Crystals. (E) N. E. Filonenko, T. P. Nikitina, and N. M. Kamentseva. 14, 633 (1970) [187, 569 (1969)]

KAMINSKII, A. A.

Synthesis and Optical Properties of Crystals of $YAlO_3$ Activated by Nd^{3+} Ions. (E) Kh. S. Bagdasarov, A. A. Kaminskii, and G. I. Rogov. 14, 346 (1969) [185, 1022 (1969)]

Optical and Generation Properties of Mixed CdF_2-YF_3 Crystals Activated with Nd^{3+} Ions. (E) Kh. S. Bagdasarov, O. E. Izotova, A. A. Kaminskii, L. Li, and B. P. Sobolev. 14, 939 (1970) [188, 1042 (1969)]

KANAEV, A. A.

Detection of Adsorptive Plasticizing of the Surface Layer of Metal under the Effect of an Active Lubricant in Boundary Lubrication. (E) A. A. Kanaev, V. N. L'vov, S. Ya. Velier, and P. A. Rebinder. 14, 702 (1970) [187, 314 (1969)]

KANTOR, M. M.

Texture of Acicular Crystals and Crystallographic Orientation of Dendrites in Molybdenum Ingots. (E/T) N. V. Ageev, D. V. Ignatov, and M. M. Kantor. 14, 158 (1969) [184, 1088 (1969)]

KAPLAN, I. G.

Interference Phenomena in Photoionization of Molecules. (T) I. G. Kaplan and A. P. Markin. 14, 36 (1969) [184, 66 (1969)]

KAPUSTIN, I. I.

Construction of Automatic Machines and Their Efficiency. (T) I. I. Artobolevskii, D. Ya. Il'inskii, and I. I. Kapustin. 14, 205 (1969) [185, 282 (1969)]

Optimum Synthesis of Automatic Machines. (T) I. I. Artobolevskii, D. Ya. Il'inskii, and I. I. Kapustin. 14, 209 (1969) [185, 528 (1969)]

KARAGEORGII-ALKALAEV, P. M.

Dynamical Theory of the Regenerative Optron. (T) É. I. Adirovich, A. G. Vishnevetskii, and P. M. Karageorgii-Alkalaev. 14, 578 (1969) [186, 1281 (1969)]

KARPENKO, G. V.

Rebinder Effect in a Hydrogen Atmosphere. (E) G. V. Karpenko, I. I. Vasilenko, M. G. Khitarishvili, and V. S. Fedchenko. 14, 380 (1969) [185, 1034 (1969)]

The Effect of Nonmetallic Inclusions on the Mechanism of Formation of Fatigue Cracks. (T) A. B. Kuslitskii, V. L. Mizetskii, and G. V. Karpenko. 14, 694 (1970) [187, 79 (1969)]

KATS, A. V.

Forced Scattering on Surface Waves. (T) V. K. Gavrikov, A. V. Kats, and V. M. Kontorovich. 14, 564 (1969) [186, 1052 (1969)]

KAZANDZHAN, É. P.

Diffraction Theory of Knife-Edge and Slit Shadow Photometry. (T) L. A. Vasil'ev, É. P. Kazandzhan, and V. S. Sukhorukikh. 14, 441 (1969) [186, 70 (1969)]

KAZANSKII, A. B.

Equation of Transport of a Passive Impurity by Filtration Movement. (T) A. B. Kazanskii. 14, 961 (1970) [188, 780 (1969)]

KAZAVCHINSKII, Ya. Z.

Justification of the Form of the Equation of State Given in Terms of Elementary Functions. (T) A. A. Vasserman, Ya. Z. Kazavchinskii, and O. S. Kalenov. 14, 588 (1969) [186, 1291 (1969)]

KEL'MAN, V. M.

Mass Spectrometer with Electrostatic and Magnetic Prisms. (E) V. M. Kel'man, I. V. Rodnikova, and M. L. Uteev. 14, 155 (1969) [184, 831 (1969)]

KHADZH, I. P.

Investigation of Colored Crystals of Synthetic Quartz. (E) M. I. Samoilovich, L. I. Tsinober, and I. P. Khadzh. 14, 6 (1969) [184, 91 (1969)]

KHAIKIN, S. É.

A Reflecting Radio Telescope with 15" Resolving Power. (E) S. É. Khaikin, N. L. Kaidanovskii, Yu. N. Pariiskii, O. N. Shivris, G. B. Gel'freikh, and A. A. Stotskii. 14, 291 (1969) [185, 775 (1969)]

KHARACH, G. M.

Correlation of Calculated Estimates of the Wear on Friction Surfaces with Experiment. (E/T) I. V. Kragel'skii, E. F. Nepomnyashchii, and G. M. Kharach. 14, 371 (1969) [185, 802 (1969)]

KHARITONOV, A. I.

Pulsed Lasers as Light Sources for Shadow and Interference Instruments. (E) I. V. Ershov, A. P. Ovechkin, B. T. Fedyushin, A. I. Kharitonov, and Yu. A. Tsvetaev. 14, 1067 (1970) [189, 277 (1969)]

KHARITONOV, Yu. A.

Crystal Structure of Sodium Bichromate $Na_2Cr_2O_7 \cdot 2H_2O$. (E) Yu. A. Kharitonov, É. A. Kuz'min, and N. V. Belov. 14, 403 (1969) [186, 96 (1969)]

Crystal Structure of Calcium Chondrodite $Ca_5[SiO_4]_2(OH)_2 = Ca(OH)_2 \cdot Ca_2SiO_4$. (E) R. M. Ganiev, Yu. A. Kharitonov, V. V. Ilyukhin, and N. V. Belov. 14, 946 (1970) [188, 1281 (1969)]

KHARLAMOV, P. V.

A New Case of Integrable Equations of Motion of a Rigid Body with One Fixed Point. (T) E. I. Kharlamova and P. V. Kharlamov. 14, 971 (1970) [188, 770 (1969)]

A New Solution of the Differential Equations of Motion of a Body with a Fixed Point under Kowalewska's Conditions. (T) E. I. Kharlamova and P. V. Kharlamov. 14, 1164 (1970) [189, 967 (1969)]

KHARLAMOVA, E. I.

A New Case of Integrable Equations of Motion of a Rigid Body with One Fixed Point. (T) E. I. Kharlamova and P. V. Kharlamov. 14, 971 (1970) [188, 770 (1969)]

A New Solution of the Differential Equations of Motion of a Body with a Fixed Point under Kowalewska's Conditions. (T) E. I. Kharlamova and P. V. Kharlamov. 14, 1164 (1970) [189, 967 (1969)]

KHASIN, L. S.

Complexity Bounds for the Realization of Monotonic Symmetrical Functions by Means of Formulas in the Basis $\vee$, &, $\neg$. (T) L. S. Khasin. 14, 1149 (1970) [189, 752 (1969)]

KHAZIN, L. G.

The Problem of the Gravitational Stability of a Dust Cloud. (T) L. G. Khazin and É. É. Shnol'. 14, 322 (1969) [185, 1018 (1969)]

KHITARISHVILI, M. G.

Rebinder Effect in a Hydrogen Atmosphere. (E) G. V. Karpenko, I. I. Vasilenko, M. G. Khitarishvili, and V. S. Fedchenko. 14, 380 (1969) [185, 1034 (1969)]

KHOLODNYI, L. P.

Effect of Doping Impurities on the Anisotropy of Plastic Deformation in GaAs Single Crystals. (E) V. B. Osvenskii, L. P. Kholodnyi, and M. G. Mil'vidskii. 14, 144 (1969) [184, 1084 (1969)]

KHON'KIN, A. D.

Kinetic Equations for Mixtures of Moderately Dense Gases. (T) A. D. Khon'kin. 14, 644 (1970) [187, 287 (1969)]

KIREEV, P. S.

Properties of Cadmium Telluride p-n Junctions. (E) P. S. Kireev, L. I. Kalugina, and A. V. Vanyukov. 14, 56 (1969) [184, 324 (1969)]

KIRENSKII, L. V.

Magnetostriction Instability of a Parametron Employing a Magnetic Thin Film. (E) L. V. Kirenskii, N. M. Salanskii, and V. I. Litvinchuk. 14, 40 (1969) [184, 70 (1969)]

KIRIENKO, V. I.

Field-Ion Microscopy of Defects in the Crystal Structure of Neutron-Irradiated Tungsten. (E) V. I. Kirienko and L. P. Potapov. 14, 607 (1969) [186, 1309 (1969)]

KIRILLIN, V. A.

Explosion MHD Generator with Superconducting Magnet System. (E) V. A. Kirillin, V. A. Al'tov, E. I. Asinovskii, A. N. Dremin, F. I. Dubovitskii, V. B. Zenkevich, Yu. A. Kuznetsov, E. F. Lebdev, S. D. Savrov, V. V. Sychev, and A. E. Sheindin. 14, 266 (1969) [185, 316 (1969)]

KIRILLOVA, F. M.

Application of the Principle of the Maximum to the Calculation of Optimum Equations of Discrete Systems. (T) R. Gabasov and F. M. Kirillova. 14, 1152 (1970) [189, 963 (1969)]

KIR'YANOV, A. P.

Mössbauer Effect at Sn-119 Nuclei in Tin Films Deposited at 4.2°K. (E) N. E. Alekseevskii, A. P. Kir'yanov, Yu. A. Samarskii, and V. I. Tsebro. 14, 581 (1969) [186, 1284 (1969)]

KLESHCHEV, G. V.

Characteristics of Diffuse Scattering of X Rays at the Zone Stage of Aging of Alloy AlAg. (E/T) G. V. Kleshchev, A. V. Sheinkman, D. V. Shumilov, and A. E. Vanin. 14, 796 (1970) [187, 1261 (1969)]

KLEVTSOV, P. V.

Synthesis and X-Ray and Thermal Studies of Potassium Rare-Earth Tungstates, $KLn(WO_4)_2$, Ln = Rare-Earth Element. (E) P. V. Klevtsov and L. P. Kozeeva. 14, 185 (1969) [185, 571 (1969)]

KLYUEV, Yu. A.

Absorption Spectra of Diamonds of Intermediate Type. (E) Yu. A. Klyuev, A. N. Rykov, Yu. A. Dudenkov, and V. M. Zubkov. 14, 1133 (1970) [189, 771 (1969)]

KNIGIN, P. I.

Theory of a Regenerative Optron. (T) É. I. Adirovich, A. G. Vishnevetskii, P. I. Knigin, O. A. Tikhomirova, and É. V. Tsibulin. 14, 538 (1969) [186, 799 (1969)]

The Condition for Complete Regeneration in an Optron with a Photoresistor. (E) É. I. Adirovich, P. I. Knigin, O. A. Tikhomirova, and É. V. Tsibulin. 14, 550 (1969) [186, 1037 (1969)]

KOBZAREVA, S. A.

Oriented Crystallization on High-Polymer Boundary Layers, Copying the Electric Relief of the Crystalline-Substrate Surface by Virtue of the Electret Mechanism. (E) G. I. Distler and S. A. Kobzareva. 14, 935 (1970) [188, 811 (1969)]

KOCHINA, N. N.

A Solution of the One-Dimensional Diffusion Equation in a Bounded Region. (T) N. N. Kochina. 14, 19 (1969) [184, 562 (1969)]

Some Solutions of the Inhomogeneous Diffusion Equation. (T) N. N. Kochina. 14, 419 (1969) [186, 54 (1969)]

KOGAN, B. I.

Vibrations of a Rotating Disc with Partial Retardation. (T) B. I. Kogan and P. Ya. Bershtein. 14, 506 (1969) [186, 289 (1969)]

KOLONTSOVA, E. V.

Small-Angle X-Ray Scattering from Neutron-Irradiated Lithium Fluoride. (E) I. V. Telegina and E. V. Kolontsova. 14, 714 (1970) [187, 566 (1969)]

KOLOSOV, M. A.

Limits of Applicability of the Buger Law in Water Mists (Clouds) in Relation to the Angular Aperture of the Receiver and the Parameters of the Laser Beam. (E) M. A. Kolosov, A. V. Sokolov, L. V. Fedorova, and R. A. Shirei. 14, 800 (1970) [187, 1264 (1969)]

KOMAR, A. P.

Formation of the N* (3, 3)-Isobar in the Reaction $\pi^- p \rightarrow \pi^+ \pi^- n$. (T) A. P. Komar, M. M. Makarov, V. V. Sarantsev, and N. S. Gasilova. 14, 74 (1969) [184, 584 (1969)]

Gabor Holograms with a Pure Base Beam. (E/T) A. P. Komar, B. G. Turukhano, and N. Turukhano. 14, 610 (1969) [186, 1312 (1969)]

KONTOROVICH, V. M.

Forced Scattering on Surface Waves. (T) V. K. Gavrikov, A. V. Kats, and V. M. Kontorovich. 14, 564 (1969) [186, 1052 (1969)]

KOPACH, V. R.

Structure and Anomalous Physical Properties of Metallic Islands Condensed on Dielectric Substrates. (E) L. S. Palatnik, B. T. Boiko, A. N. Sinel'nikov, and V. R. Kopach. 14, 1211 (1970) [189, 996 (1969)]

KOROBEINIKOV, V. P.

Application of Dimensional Analysis to Problems of Interplanetary Gas Motion Associated with Solar Flares. (T) V. P. Korobeinikov. 14, 308 (1969) [185, 1254 (1969)]

KOROZA, V. I.

Variational Method for Solving a Wave-Propagation Boundary-Value Problem. (T) V. I. Koroza. 14, 526 (1969) [186, 795 (1969)]

KOSHMANENKO, V. D.

An Asymptotic Field Theory in Terms of Operator Jacobian Matrices. (T) Yu. M. Berezanskii and V. D. Koshmanenko. 14, 1064 (1970) [189, 273 (1969)]

KOTELYANSKII, I. M.

Heteroepitaxial Growth of Cadmium Sulfide Films. (E) S. A. Aitkhozhin, G. B. Bokii, V. F. Dvoryankin, I. M. Kotelyanskii, and V. V. Panteleev. 14, 1018 (1970) [188, 1032 (1969)]

KOTOVA, L. L.

Self-Diffusion of Carbon. (E) E. S. Golovina, V. S. Chaplyagina, and L. L. Kotova. 14, 705 (1970) [187, 558 (1969)]

KOVALENKO, V. S.

The Crystal Structure of $NaNd_3[GeO_4]_2(OH)_2$. (E) A. V. Chichagov, V. S. Kovalenko, V. I. Ponomarev, and N. V. Belov. 14, 1037 (1970) [189, 88 (1969)]

KOVALEV, A. A.

Dependence of the Degree of Polarization of Induced Emission in Dyes on the Angle between the Direction of Polarization of the Exciting Light and the Axis of the Resonator. (E/T) A. N. Sevchenko, A. A. Kovalev, and V. A. Pilipovich. 14, 811 (1970) [187, 1039 (1969)]

KOVALEV, I. F.

Principal Spectral Parameters of the Raman Lines of Tetramethyl Silane and Methyl Chlorosilanes. (E) I. V. Shevchenko, I. F. Kovalev, M. G. Voronkov, and E. Ya. Lukevits. 14, 137 (1969) [184, 824 (1969)]

KOZEEVA, L. P.

Synthesis and X-Ray and Thermal Studies of Potassium Rare-Earth Tungstates, $KLn(WO_4)_2$, Ln = Rare-Earth Element. (E) P. V. Klevtsov and L. P. Kozeeva. 14, 185 (1969) [185, 571 (1969)]

KOZLOV, M. V.

The Correcting-Capacities of Linear Codes. (T) M. V. Kozlov. 14, 413 (1969) [186, 275 (1969)]

KOZLOVSKII, E. N.

Double-Beam Reflection in Crystals and Its Use in Electro-optical Modulators. (T/E) Yu. É. Kamach, E. N. Kozlovskii, V. M. Ovchinnikov, and V. A. Shamburov. 14, 301 (1969) [185, 1285 (1969)]

KOZMA, R. S.

An Approximate Method of Determining the Optical Characteristics of Dye Molecules. (T) V. E. Romanov, B. M. Yavorskii, and R. S. Kozma. 14, 772 (1970) [187, 784 (1969)]

KOZOROVITSKII, L. L.

Transport of Heat in a Plasma along a Magnetic Field (Replacement Wave). (E/T) A. A. Ivanov, L. L. Kozorovitskii, and V. L. Rusanov. 14, 126 (1969) [184, 811 (1969)]

KRAGEL'SKII, I. V.

Correlation of Calculated Estimates of the Wear on Friction Surfaces with Experiment. (E/T) I. V. Kragel'skii, E. F. Nepomnyashchii, and G. M. Kharach. 14, 371 (1969) [185, 802 (1969)]

Preliminary Displacement on Elastic Contact between Solids. (T) N. B. Demkin and I. V. Kragel'skii. 14, 603 (1969) [186, 812 (1969)]

KRASNOPEROV, V. M.

Proof of the Existence of Charged States of Krypton in the Matrices of Rubidium Halides by Means of the Mössbauer Method. (T/E) V. M. Krasnoperov, A. M. Murin, N. K. Cherezov, and I. A. Yutlandov. 14, 458 (1969) [186, 296 (1969)]

KRASNUSHKIN, P. E.

Contour Integral Representation of Normal Wave Expansions. (T) P. E. Krasnushkin. 14, 318 (1969) [185, 1014 (1969)]

Expansion in Normal Waves in a Spherically Stratified Medium. (T) P. E. Krasnushkin. 14, 326 (1969) [185, 1262 (1969)]

KRASYUK, B. A.

Charge Accumulation in Epitaxial p-n Structures of Gallium Arsenide. (E) N. S. Dubrovskaya, B. A. Krasyuk, S. S. Meskin, N. F. Nedel'skii, V. N. Ravich, and V. I. Sobolev. 14, 664 (1970) [187, 298 (1969)]

Shadow Electron-Optical Moiré Patterns Produced by Electrical and Magnetic Microfields. (E) V. N. Gusev and B. A. Krasyuk. 14, 699 (1970) [187, 311 (1969)]

KREMENETSKII, S. D.

Method of Eigenfunctions for Incorrectly Posed Synthesis Problem of a Linear Emitter. (T) L. D. Bakhrakh and S. D. Kremenetskii. 14, 749 (1970) [187, 758 (1969)]

The Method of Successive Approximations for Incorrectly Formulated Problems in the Theory of the Synthesis of Antenna Systems. (T) L. D. Bakhrakh and S. D. Kremenetskii. 14, 808 (1970) [187, 1035 (1969)]

KRITSKAYA, V. K.

Ordering Processes in Neutron-Irradiated Martensite. (E) V. K. Kritskaya and V. A. Il'ina. 14, 389 (1969) [185, 1273 (1969)]

Effect of Electron Irradiation on the State of the Carbon in Martensite. (E) V. K. Kritskaya, V. A. Il'ina, and L. N. Bystrov. 14, 488 (1969) [186, 89 (1969)]

KUDRYAVTSEV, B. A.

Dynamic Problem for a Plane with a Cut. (T) V. Z. Parton and B. A. Kudryavtsev. 14, 282 (1969) [185, 541 (1969)]

KUKHTINA, I. N.

Automatic Cathode-Ray Tube Scanner. (E) V. F. Borisovskii, N. D. Dikusar, V. V. Ermolaev, A. D. Zlobin, I. N. Kukhtina, I. I. Skryl', A. I. Filippov, V. N. Shigaev, and V. N. Shkundenkov. 14, 256 (1969) [185, 306 (1969)]

KUKIN, V. D.

Quasioptical Potential in Certain Simple Models of Quantum Field Theory. (T) V. D. Kukin. 14, 141 (1969) [184, 1080 (1969)]

KUKSENKO, B. V.

Excitation of Oscillations and Dissociation of Diatomic Molecules in Atom-Molecule Collisions in Gases at High Temperatures. (T) B. V. Kuksenko and S. A. Losev. 14, 215 (1969) [185, 69 (1969)]

KULEMIN, A. V.

Diffusion in the System Cu–Zn when Subjected to Alternating Deformations. (E) A. V. Kulemin and A. M. Mitskevich. 14, 1113 (1970) [189, 518 (1969)]

KURILKO, V. I.

Induced Acceleration of Modulated Current in an Inverted Paramagnetic Substance. (T) E. K. Zavoiskii and V. I. Kurilko. 14, 790 (1970) [187, 1029 (1969)]

KUSLITSKII, A. B.

The Effect of Nonmetallic Inclusions on the Mechanism of Formation of Fatigue Cracks. (T) A. B. Kuslitskii, V. L. Mizetskii, and G. V. Karpenko. 14, 694 (1970) [187, 79 (1969)]

KUTATELADZE, S. S.

Calculation of the Wall Turbulence Constant. (T) M. A. Gol'dshtik and S. S. Kutateladze. 14, 194 (1969) [185, 535 (1969)]

KUZIN, N. N.

On the Real Value of the Pressure of the Polymorphic Transformation in Iron. (E) L. F. Vereshchagin, A. A. Semerchan, N. N. Kuzin, and Yu. A. Sadkov. 14, 340 (1969) [185, 785 (1969)]

Change of the Electrical Resistance of Rb, Cs, and Ca under Pressure. (E) L. F. Vereshchagin, A. A. Semerchan, N. N. Kuzin, and Yu. A. Sadkov. 14, 557 (1969) [186, 1045 (1969)]

KUZ'MENKO, V. M.

Allotropic Transformation of Ytterbium in Films Condensed on a Cold Substrate. (E) B. G. Lazarev, V. M. Kuz'menko, A. I. Sudovtsov, and R. F. Bulatova. 14, 77 (1969) [184, 587 (1969)]

The Electrical Resistance Minimum of Lutetium Films. (E) B. G. Lazarev, V. M. Kuz'menko, and A. I. Sudovtsov. 14, 129 (1969) [184, 815 (1969)]

KUZ'MIN, É. A.

Crystal Structure of Sodium Bichromate $Na_2Cr_2O_7 \cdot 2H_2O$. (E) Yu. A. Kharitonov, É. A. Kuz'min, and N. V. Belov. 14, 403 (1969) [186, 96 (1969)]

Interpretation of a Vector System by Using One Multiple Peak. (T) É. A. Kuz'min, V. V. Ilyukhin, and N. V. Belov. 14, 1136 (1970) [189, 774 (1969)]

KUZ'MIN, R. N.

Hyperfine Structure of the Bragg Maxima in Mössbauer Spectrography. (E) M. A. Andreev and R. N. Kuz'min. 14, 298 (1969) [185, 1282 (1969)]

KUZNETSOV, Yu. A.

Explosion MHD Generator with Superconducting Magnet System. (E) V. A. Kirillin, V. A. Al'tov, E. I. Asinovskii, A. N. Dremin, F. I. Dubovitskii, V. B. Zenkevich, Yu. A. Kuznetsov, E. F. Lebdev, S. D. Savrov, V. V. Sychev, and A. E. Sheindlin. 14, 266 (1969) [185, 316 (1969)]

LARKIN, A. I.

New High-Resolution Photographic Emulsions and Their Investigation by Means of Holographic Resolvometry. (E) Yu. A. Bykovskii, A. I. Larkin, A. A. Markilov, R. V. Ryabova, and D. M. Samoilovich. 14, 246 (1969) [185, 552 (1969)]

LAZARENKO, B. R.

Effect of Surface Tension on Cavitation Erosion. (E) B. R. Lazarenko, K. K. Shal'nev, I. I. Varga, D. Shebesht'en, L. Balint, M. K. Bologa, and A. F. Derendovskii. 14, 1025 (1970) [188, 1269 (1969)]

LAZAREV, B. G.

Allotropic Transformation of Ytterbium in Films Condensed on a Cold Substrate. (E) B. G. Lazarev, V. M. Kuz'menko, A. I. Sudovtsov, and R. F. Bulatova. 14, 77 (1969) [184, 587 (1969)]

A 112 kOe Superconducting Laboratory Solenoid of Deformable Alloy Wire. (E) B. G. Lazarev, L. S. Lazareva, V. R. Golik, and S. I. Goridov. 14, 82 (1969) [184, 89 (1969)]

The Electrical Resistance Minimum of Lutetium Films. (E) B. G. Lazarev, V. M. Kus'menko, and A. I. Sudovtsov. 14, 129 (1969) [184, 815 (1969)]

On the Effect of Softening in Low-Temperature Creep of Lead in the Superconducting State. (E) I. A. Gindin, B. G. Lazarev, Ya. D. Starodubov, and V. P. Lebedev. 14, 1011 (1970) [189, 803 (1969)]

Dimensional Effect in Magnetization of Hard Superconductors. (E) B. G. Lazarev and O. N. Ovcharenko. 14, 1223 (1970) [189, 1218 (1969)]

LAZAREVA, L. S.

A 112 kOe Superconducting Laboratory Solenoid of Deformable Alloy Wire. (E) B. G. Lazarev, L. S. Lazareva, V. R. Golik, and S. I. Goridov. 14, 82 (1969) [184, 89 (1969)]

LAZUKIN, V. N.

EPR in Glass Containing Two Transition Elements. Appearance of Cross Relaxation and Spin Diffusion Processes in Some Cobalt-Containing Glasses. (E) L. D. Bogomolova, V. N. Lazukin, and N. V. Petrovykh. 14, 243 (1969) [185, 548 (1969)]

The Hyperfine Structure of the EPR Spectra of Cu(II) in Some Oxide Glasses. (E/T) L. D. Bogomolova, V. N. Lazukin, E. N. Nozdrina, and N. V. Petrovykh. 14, 760 (1970) [187, 768 (1969)]

A Possible Origin of the Electron Paramagnetic Resonance Spectrum of Nitrogen Ions in Diamond. (E) V. N. Lazukin and A. N. Terent'evskii. 14, 793 (1970) [187, 1032 (1969)]

Experimental Observation of $^{13}C^{4+}$, $^{29}Si^{4+}$, $^{77}Se^{4+}$, and S^{4+} Ions in a Diamond Lattice Using Electron Paramagnetic Resonance. (E) V. N. Lazukin and A. N. Terent'evskii. 14, 989 (1970) [188, 1026 (1969)]

LEBEDEV, E. F.

Explosion MHD Generator with Superconducting Magnet System. (E) V. A. Kirillin, V. A. Al'tov, E. I. Asinovskii, A. N. Dremin, F. I. Dubovitskii, V. B. Zenkevich, Yu. A. Kuznetsov, E. F. Lebedev, S. D. Savrov, V. V. Sychev, and A. E. Sheindlin. 14, 266 (1969) [185, 316 (1969)]

LEBEDEV, V. P.

On the Effect of Softening in Low-Temperature Creep of Lead in the Superconducting State. (E) I. A. Gindin, B. G. Lazarev, Ya. D. Starodubov, and V. P. Lebedev. 14, 1011 (1970) [188, 803 (1969)]

LEBEDEV, Ya. S.

Variational Analysis of Isotropic EPR Spectra in Fourier Space. (T) S. N. Dobryakov and Ya. S. Lebedev. 14, 351 (1969) [185, 1028 (1969)]

LEICHKIS, D. L.

Raising the Metastable Boundary by Vibration of Metal Melts. (E/T) D. L. Leichkis and N. V. Mikhailov. 14, 172 (1969) [184, 1321 (1969)]

Nucleation of the Crystalline Phase in Supercooled Melts. (E) D. L. Leichkis and N. V. Mikhailov. 14, 1226 (1970) [189, 1222 (1969)]

LETICHEVSKII, A. A.

Functional Equivalence of Automata with a Final State. (T) A. A. Letichevskii. 14, 190 (1969) [185, 58 (1969)]

LI, L.

Optical and Generation Properties of Mixed CdF_2-YF_3 Crystals Activated with Nd^{3+} Ions. (E) Kh. S. Bagdasarov, O. E. Izotova, A. A. Kaminskii, L. Li, and B. P. Sobolev. 14, 939 (1970) [188, 1042 (1969)]

LIDORENKO, N. S.

Effect of Tunneling on the Efficiency of Thermoelectric Devices. (T) N. S. Lidorenko, V. A. Andriyako, L. D. Dudkin, É. L. Nagaev, and O. M. Narva. 14, 591 (1969) [186, 1295 (1969)]

The Structure of ZrO_2 with Admixtures of Sc. (E) N. S. Lidorenko, A. S. Kagan, L. A. Bykovskaya, T. V. Efimovskaya, L. A. Lyutsareva, S. P. Chizhik, and S. P. Shumanova. 14, 806 (1970) [187, 791 (1969)]

LIEBMAN, G.

Effect of Ultrasound upon the Formation of High-Energy Particle Tracks in Liquid-Hydrogen Bubble Chambers. (E) V. A. Akulichev, L. R. Gavrilov, V. G. Grebinnik, V. A. Zhukov, G. Liebman, A. P. Manych, Yu. I. Rudin, L. D. Rozenberg, and G. I. Selivanov. 14, 1173 (1970) [189, 973 (1969)]

LIKHACHEV, V. A.

Hardening of Metals by Temporary Lowering of the Temperature during Creep. (E) G. V. Vladimirova, V. A. Likhachev, M. M. Myshlyaev, and S. S. Olevskii. 14, 1020 (1970) [188, 1034 (1969)]

LIN, D. N.

Observation of Plasma Noise during Turbulent Heating. (E) Yu. G. Kalinin, D. N. Lin, L. I. Rudakov, V. D. Ryutov, and V. A. Skoryupin. 14, 1074 (1970) [189, 284 (1969)]

LITUNOVSKII, R. N.

Possible Mode of Acceleration and Beam Extraction in an Isochronous Cyclotron. (T) Yu. G. Basargin and R. N. Litunovskii. 14, 585 (1969) [186, 1288 (1969)]

LITVAK, B. L.

Optimization of Complex Multiply-Connected Systems of High Dimensions. (T) M. V. Meerov and B. L. Litvak. 14, 740 (1970) [187, 1009 (1969)]

LITVINCHUK, V. I.

Magnetostriction Instability of a Parametron Employing a Magnetic Thin Film. (E) L. V. Kirenskii, N. M. Salanskii, and V. I. Litvinchuk. 14, 40 (1969) [184, 70 (1969)]

LIVSHITS, B. L.

Generation of Stimulated Radiation in a Dispersive Cavity. (T) B. L. Livshits and V. N. Tsikunov. 14, 473 (1969) [186, 557 (1969)]

LOSEV, S. A.

Excitation of Oscillations and Dissociation of Diatomic Molecules in Atom-Molecule Collisions in Gases at High Temperatures. (T) B. V. Kuksenko and S. A. Losev. 14, 215 (1969) [185, 69 (1969)]

Dissociation of Oxygen Molecules by O_2-O_2 and O_2-O Collisions. (E) S. A. Losev and O. P. Shatalov. 14, 227 (1969) [185, 293 (1969)]

LOSHCHININ, V. S.

Characteristic Criterion for Asymptotically Stable Limiting Motion of a Mechanical Apparatus. (T) I. I. Artobolevskii and V. S. Loshchinin. 14, 435 (1969) [186, 279 (1969)]

An Interaction Procedure for Calculating the Characteristic Criterion of a Periodic Marginal Motion of a Machine Unit. (T) I. I. Artobolevskii and V. S. Loshchinin. 14, 438 (1969) [186, 529 (1969)]

LUGOVOI, V. N.

Self-Focusing High-Intensity Light Beams. (T) A. L. Dyshko, V. N. Lugovoi, and A. M. Prokhorov. 14, 976 (1970) [188, 792 (1969)]

LUKEVITS, E. Ya.

Principal Spectral Parameters of the Raman Lines of Tetramethyl Silane and Methyl Chlorosilanes. (E) I. V. Shevchenko, I. F. Kovalev, M. G. Voronkov, and E. Ya. Lukevits. 14, 137 (1969) [184, 824 (1969)]

LUNKIN, B. V.

The Problem of Measuring the Quantity of a Medium in a Closed Volume. (E) B. N. Petrov, V. A. Viktorov, and B. V. Lunkin. 14, 479 (1969) [186, 564 (1969)]

L'VOV, V. N.

Detection of Adsorptive Plasticizing of the Surface Layer of Metal under the Effect of an Active Lubricant in Boundary Lubrication. (E) A. A. Kanaev, V. N. L'vov, S. Ya. Veiler, and P. A. Rebinder. 14, 702 (1970) [187, 314 (1969)]

LYALIN, G. N.

Two-Photon Excitation in Uranyl Crystals by a Ruby Laser. (E) G. N. Lyalin and L. E. Solov'ev. 14, 444 (1969) [186, 73 (1969)]

LYUBIMOV, B. Ya.

Lagrangian Description of the Dynamics of Turbulent Motion. (T) B. Ya. Lyubimov. 14, 97 (1969) [184, 1069 (1969)]

LYUBIMOV, V. N.

Consideration of the Piezoelectric Effect in the Theory of Elastic Waves for Crystals of Different Symmetries. (T) V. N. Lyubimov. 14, 567 (1969) [186, 1055 (1969)]

LYUBOV, B. Ya.

Calculation of the Time Necessary for the Formation of an Atmosphere of Impurity Atoms around a Boundary Dislocation. (T) G. M. Gutnikova and B. Ya. Lyubov. 14, 16 (1969) [184, 1095 (1969)]

LYUTSAREVA, L. A.

The Structure of ZrO_2 with Admixtures of Sc. (E) N. S. Lidorenko, A. S. Kagan, L. A. Bykovskaya, T. V. Efimovskaya, L. A. Lyutsareva, S. P. Chizhik, and S. P. Shumanova. 14, 806 (1970) [187, 791 (1969)]

MAKAROV, E. S.

Factor of Chemical Indifference of Mutually Substituted Atoms in Crystals of Solid Solutions Formed by Intermetallic Compounds. (T) E. S. Makarov. 14, 406 (1969) [186, 313 (1969)]

MAKAROV, M. M.

Formation of the $N^*(3, 3)$-Isobar in the Reaction $\pi^- p \to \pi^+ \pi^- n$. (T) A. P. Komar, M. M. Makarov, V. V. Sarantsev, and N. S. Gasilova. 14, 74 (1969) [184, 584 (1969)]

MALOV, L. A.

Quadrupole and Octupole One-Phonon States of Nuclei in the Range $174 \le A \le 188$. (T) L. A. Malov, V. G. Solov'ev, and U. M. Fainer. 14, 461 (1969) [186, 299 (1969)]

Octupole States of Even-Even Nuclides in the Range $150 \le A \le 176$. (T/E) L. A. Malov, V. G. Solov'ev, and S. I. Fedorov. 14, 1186 (1970) [189, 987 (1969)]

MALOV, Yu. V.

Electron Microscope Study of Artificial Polycrystalline Diamonds, Ballas and Carbonado. (E) Yu. V. Malov. 14, 545 (1969) [186, 807 (1969)]

MALYUZHINETS, G. M.

An Inverse Problem in the Theory of Diffraction. (T) G. M. Malyuzhinets. 14, 118 (1969) [184, 1301 (1969)]

MAMONTOV, E. V.

A Note on Unsteady Near-Sonic Flows. (T) E. V. Mamontov. 14, 197 (1969) [185, 538 (1969)]

MANUIL'SKII, A. D.

Energy Exchange between Active Centers in Glass. (E) N. S. Belokrinitskii, M. E. Zhabotinskii, A. D. Manuil'skii, Yu. P. Rudnitskii, M. S. Soskin, V. V. Tsapkin, and G. V. Éllert. 14, 276 (1969) [185, 557 (1969)]

MANYCH, A. P.

Effect of Ultrasound upon the Formation of High-Energy Particle Tracks in Liquid-Hydrogen Bubble Chambers. (E) V. A. Akulichev, L. R. Gavrilov, V. G. Grebinnik, V. A. Zhukov, G. Liebman, A. P. Manych, Yu. I. Rudin, L. D. Rozenberg, and G. I. Selivanov. 14, 1173 (1970) [189, 973 (1969)]

MARKILOV, A. A.

New High-Resolution Photographic Emulsions and Their Investigation by Means of Holographic Resolvometry. (E) Yu. A. Bykovskii, A. I. Larkin, A. A. Markilov, R. V. Ryabova, and D. M. Samoilovich. 14, 246 (1969) [185, 552 (1969)]

MARKIN, A. P.

Interference Phenomena in Photoionization of Molecules. (T) I. G. Kaplan and A. P. Markin. 14, 36 (1969) [184, 66 (1969)]

MARKOV, A. I.

Rupture Strength Criteria for Brittle Bodies under Conditions of Torsion, Tension and Torsion, and Compression. (T/E) A. I. Markov, N. V. Mikhailov, and P. A. Rebinder. 14, 374 (1969) [185, 805 (1969)]

MARKOV, Yu. F.

The Existence of a Diamond-Like Semiconductor in a Glassy State. (E) N. A. Goryunova, L. B. Zlatkin, Yu. F. Markov, and A. I. Stekhanov. 14, 72 (1969) [184, 582 (1969)]

MASHKOV, S. A.

A Numerical Method for the Analysis of Plane Mechanisms. (T) S. A. Mashkov. 14, 973 (1970) [188, 1250 (1969)]

MASHKOVA, E. S.

Experimental Test of the Chain Model for the Scattering of Ions by Crystals. (T/E) I. N. Evdokimov, E. S. Mashkova, and V. A. Molchanov. 14, 467 (1969) [186, 549 (1969)]

MASLENNIKOVA, V. N.

Solution of the Cauchy Problem and Its Asymptotic Behavior for $t \to \infty$, for the Linearized Equations of a Rotating Viscous Fluid. (T) V. N. Maslennikova. 14, 1158 (1970) [189, 1189 (1969)]

MASTOV, É. M.

Photomagnetic Effect in Cadmium Telluride Films Giving Anomalously High Photovoltages. (E) É. I. Adirovich, É. M. Mastov, and Yu. M. Yuabov. 14, 994 (1970) [188, 1254 (1969)]

MEDVEDEV, A. A.

Investigation of Optical Breakdown in Air, Induced by Ultrashort Pulses, Using Moving Image Photography and an Image Converter. (E) B. Z. Gorbenko, Yu. A. Drozhbin, S. D. Kaitmazov, A. A. Medvedev, A. M. Prokhorov, and A. M. Tolmachov. 14, 764 (1970) [187, 772 (1969)]

MEEROV, M. V.

Optimization of Complex Multiply-Connected Systems of High Dimensions. (T) M. V. Meerov and B. L. Litvak. 14, 740 (1970) [187, 1009 (1969)]

MEILIKHOV, E. Z.

Excitation of Nonpotential Oscillations in a Solid-State Plasma. (T) A. A. Ivanov, E. Z. Meilikhov, V. V. Parail, and D. A. Frank-Kamenetskii. 14, 652 (1970) [187, 68 (1969)]

MEL'NIK, B. A.

X-Ray Study of the Structure of Liquid Lead. (E) A. V. Romanova and B. A. Mel'nik. 14, 1084 (1970) [189, 294 (1969)]

MEL'NIKOVA, L. S.

The Magnetoresistance and the Hall Effect of Nickel-Copper Thin Films. (E) R. G. Annaev, G. Myalikgulyev, and L. S. Mel'nikova. 14, 758 (1970) [187, 765 (1969)]

MERKUR'EV, S. P.

Trace Equation for a Three-Particle System. (T) V. S. Buslaev and S. P. Merkur'ev. 14, 1055 (1970) [189, 269 (1969)]

MESKIN, S. S.

Charge Accumulation in Epitaxial p-n Structures of Gallium Arsenide. (E) N. S. Dubrovskaya, B. A. Krasyuk, S. S. Meskin, N. F. Nedel'skii, V. N. Ravich, and V. I. Sobolev. 14, 664 (1970) [187, 298 (1969)]

MESYATS, G. A.

Cathode and Anode Flares during an Impulsive Vacuum Discharge in the Nanosecond Range. (E) S. P. Bugaev, G. A. Mesyats, and D. I. Prosurovskii. 14, 605 (1969) [186, 1067 (1969)]

MIKHAILOV, B. P.

Effect of Mechanical Vibration on the Structure of Cast Niobium-Tin Superconducting Alloys. (E) E. M. Savitskii, B. P. Mikhailov, and V. V. Baron. 14, 1215 (1970) [189, 1000 (1969)]

Composite Superconductors Obtained from Alloys by the Phase Substitution Method. (E) E. M. Savitskii, B. P. Mikhailov, and V. V. Baron. 14, 1229 (1970) [189, 1226 (1969)]

MIKHAILOV, N. V.

Raising the Metastable Boundary by Vibration of Metal Melts. (E/T) D. L. Leichkis and N. V. Mikhailov. 14, 172 (1969) [184, 1321 (1969)]

Rupture Strength Criteria for Brittle Bodies under Conditions of Torsion, Tension and Torsion, and Compression. (T/E) A. I. Markov, N. V. Mikhailov, and P. A. Rebinder. 14, 374 (1969) [185, 805 (1969)]

Nucleation of the Crystalline Phase in Supercooled Melts. (E) D. L. Leichkis and N. V. Mikhailov. 14, 1226 (1970) [189, 1222 (1969)]

MIL'VIDSKII, M. G.

Effect of Doping Impurities on the Anisotropy of Plastic Deformation in GaAs Single Crystals. (E) V. B. Osvenskii, L. P. Kholodnyi, and M. G. Mil'vidskii. 14, 144 (1969) [184, 1084 (1969)]

MININ, V. F.

The Nature of Pearl Lightning. (T) V. F. Minin and F. Kh. Baibulatov. 14, 979 (1970) [188, 795 (1969)]

MIRKIN, L. I.

On the Possibility of Impregnating Iron with Carbon by the Action of a Laser Light Pulse. (E) L. I. Mirkin. 14, 494 (1969) [186, 305 (1969)]

Plastic Deformation of Metals Caused by a 10^{-8} sec Laser Pulse. (E) L. I. Mirkin. 14, 1128 (1970) [189, 528 (1969)]

MIRZADZHANZADE, A. Kh.

The Law of Gas Filtration in a Porous Medium. (E) A. Kh. Mirzadzhanzade, M. A. Guseinzade, A. Sh. Asadov, and G. M. Iskenderov. 14, 99 (1969) [184, 794 (1969)]

MITSKEVICH, A. M.

Diffusion in the System Cu-Zn when Subjected to Alternating Deformations. (E) A. V. Kulemin and A. M. Mitskevich. 14, 1113 (1970) [189, 518 (1969)]

MIZETSKII, V. L.

The Effect of Nonmetallic Inclusions on the Mechanism of Formation of Fatigue Cracks. (T) A. B. Kuslitskii, V. L. Mizetskii, and G. V. Karpenko. 14, 694 (1970) [186, 79 (1969)]

MOGUTNOV, B. M.

Heat of Ordering for Ni_2Cr Alloy. (E) E. Z. Vintaikin, V. P. Itkin, B. M. Mogutnov, and G. G. Urushadze. 14, 263 (1969) [185, 313 (1969)]

MOKUL'SKII, M. A.

Detecting Soft X-Radiation with Electron-Optical Converters. (E) V. A. Bryzgunov, M. M. Butslov, and M. A. Mokul'skii. 14, 338 (1969) [185, 782 (1969)]

MOLCHANOV, V. A.

Scattering of Ions by Crystals as a Function of Initial Ion Energy. (E) V. A. Molchanov, V. A. Snisar', and V. M. Chicherov. 14, 43 (1969) [184, 74 (1969)]

Experimental Test of the Chain Model for the Scattering of Ions by Crystals. (T/E) I. N. Evdokimov, E. S. Mashkova, and V. A. Molchanov. 14, 467 (1969) [186, 549 (1969)]

MOROZOV, E. M.

A Variational Principle in the Mechanics of Rupture. (T) E. M. Morozov. 14, 181 (1969) [184, 1308 (1969)]

An Energy Condition for the Growth of Cracks in Elastoplatic Bodies. (T) E. M. Morozov. 14, 717 (1970) [187, 57 (1969)]

Conditions at the End of a Crack. (T/E) L. A. Galin, Ya. B. Fridman, G. P. Cherepanov, E. M. Morozov, and V. Z. Parton. 14, 816 (1970) [187, 754 (1969)]

MOSEEV, V. V.

Concerning Realization of the Theoretical Limit of Resolution of an Electron Microscope. (E) P. A. Stoyanov, V. V. Moseev, and V. V. Polivanov. 14, 449 (1969) [186, 78 (1969)]

MOSKVITIN, V. V.

Variable Plasticity and Accumulation of Damage. (T/E) V. V. Moskvitin. 14, 178 (1969) [184, 796 (1969)]

MOVSESOV, G. E.

Effect of Reversible Friction on Dislocation and Vacancy Density in the Surface Layer of a Metal. (E) V. D. Evdokimov and G. E. Movsesov. 14, 491 (1969) [186, 302 (1969)]

MUKHAMEDOVA, D. A.

Negative Dispersion of Light in $CaWO_4:Nd^{3+}$ Crystals. (E) N. K. Bel'skii and D. A. Mukhamedova. 14, 240 (1969) [185, 545 (1969)]

Absorption of Light in a $CaWO_4:Nd^{3+}$ Crystal with Na^+ Compensation in the 1.06-μ Range. (E) D. A. Mukhamedova. 14, 991 (1970) [188, 1028 (1969)]

MURAKHVER, Yu. E.

Entropy in Nonequilibrium Statistical Mechanics. (T) Yu. E. Murakhver. 14, 46 (1969) [184, 78 (1969)]

The Velocity of a Wave Front. (T) Yu. E. Murakhver. 14, 1161 (1970) [189, 1193 (1969)]

MURIN, A. M.

Proof of the Existence of Charged States of Krypton in the Matrices of Rubidium Halides by Means of the Mössbauer Method. (T/E) V. M. Krasnoperov, A. M. Murin, N. K. Cherezov, and I. A. Yutlandov. 14, 458 (1969) [186, 296 (1969)]

MYALIKGULYEV, G.

The Magnetoresistance and the Hall Effect of Nickel-Copper Tin Films. (E) R. G. Annaev, G. Myalikgulyev, and L. S. Mel'nikova. 14, 758 (1970) [187, 765 (1969)]

MYASNIKOV, V. P.

Collisions between Solid Particles in Liquids. (T) V. P. Myasnikov. 14, 312 (1969) [185, 1258 (1969)]

MYSHLYAEV, M. M.

High Temperature Creep of Silicon Single Crystals. (E) M. M. Myshlyaev and V. I. Nikitenko. 14, 685 (1970) [187, 549 (1969)]

Hardening of Metals by Temporary Lowering of the Temperature during Creep. (E) G. V. Vladimirova, V. A. Likhachev, M. M. Myshlyaev, and S. S. Olevskii. 14, 1020 (1970) [188, 1034 (1969)]

NAGAEV, É. L.

Effect of Tunneling on the Efficiency of Thermoelectric Devices. (T) N. S. Lidorenko, V. A. Andriyako, L. D. Dudkin, É. L. Nagaev, and O. M. Narva. 14, 591 (1969) [186, 1295 (1969)]

NAIDA, O. N.

Observable Effects in Relativistic Tensor Gravitation Theories in Flat Space. (T) O. N. Naida. 14, 475 (1969) [186, 560 (1969)]

NARVA, O. M.

Effect of Tunneling on the Efficiency of Thermoelectric Devices. (T) N. S. Lidorenko, V. A. Andriyako, L. D. Dudkin, É. L. Nagaev, and O. M. Narva. 14, 591 (1969) [186, 1295 (1969)]

NEDEL'SKII, N. F.

Charge Accumulation in Epitaxial p-n Structures of Gallium Arsenide. (E) N. S. Dubrovskaya, B. A. Krasyuk, S. S. Meskin, N. F. Nedel'skii, V. N. Ravich, and V. I. Sobolev. 14, 664 (1970) [187, 298 (1969)]

NEMCHINOV, I. V.

Sudden Increase in Absorption of Laser Radiation and Associated Gasdynamic Effects. (T/E) G. G. Vilenskaya and I. V. Nemchinov. 14, 560 (1969) [186, 1048 (1969)]

NEPOMNYASHCHII, E. F.

Correlation of Calculated Estimates of the Wear on Friction Surfaces with Experiment. (E/T) I. V. Kragel'skii, E. F. Nepomnyashchii, and G. M. Kharach. 14, 371 (1969) [185, 802 (1969)]

NESTEROVSKAYA, E. A.

Production of Alkali-Halide Phosphors by Surface Treatment. (E) A. B. Gol'denberg, S. I. Golub, and E. A. Nesterovskaya. 14, 670 (1970) [187, 305 (1969)]

NEVZGLYADOV, V. G.

Inertial Motion of a Uniformly Strained Body. (T) V. G. Nevzglyadov. 14, 594 (1969) [186, 1298 (1969)]

NIKITENKO, V. I.

High Temperature Creep of Silicon Single Crystals. (E) M. M. Myshlyaev and V. I. Nikitenko. 14, 685 (1970) [187, 549 (1969)]

Effect of Impurities on the Surmounting of High Peierls Barriers by Dislocations. (E/T) V. N. Erofeev, V. I. Nikitenko, and V. B. Osvenskii. 14, 1108 (1970) [189, 513 (1969)]

NIKITINA, I. I.

Isothermal and Athermal Martensite Transformation in an Iron-Nickel-Molybdenum Alloy. (E) I. Ya. Georgieva and I. I. Nikitina. 14, 485 (1969) [186, 85 (1969)]

NIKITINA, T. P.

Sectorial Growth of Cubic Boron Nitride Crystals. (E) N. E. Filonenko, T. P. Nikitina, and N. M. Kamentseva. 14, 633 (1970) [187, 569 (1969)]

NIKOLAEVSKII, V. N.

Asymmetry Fluid Mechanics and an Averaged Description of Turbulent Flow. (T) V. N. Nikolaevskii. 14, 120 (1969) [184, 1304 (1969)]

NOVAK, L. I.

On the Influence of Alloying a Ni_3Mn Alloy with a Third 3d-Transition Element on Ordering Kinetics. (E) V. E. Panin, V. V. Prushinskii, V. P. Fadin, and L. I. Novak. 14, 1119 (1970) [189, 84 (1969)]

NOVIKOV, E. A.

Scale Similarity for Random Fields. (T) E. A. Novikov. 14, 104 (1969) [184, 1072 (1969)]

NOVIKOV, I. I.

Experimental Determination of the Velocity of Propagation of Long Centrifugal Waves Formed in Translational-Rotary Liquid Flow. (E) I. I. Novikov. 14, 17 (1969) [184, 313 (1969)]

C

NOVIKOV, N. N.
The Photocapillary Effect for Germanium. (E) A. I. Bykhovskii, A. Yu. Proleskovskaya, N. N. Novikov, and N. Ya. Gorid'ko. 14, 79 (1969) [184, 85 (1969)]

NOVIKOV, Yu. N.
Delayed Nuclear Fission. (T) É. E. Berlovich and Yu. P. Novikov. 14, 349 (1969) [185, 1025 (1969)]
Probability of Double Beta Decay of Nuclei in Regions Far Removed from the Beta-Stable Band. (T) É. E. Berlovich and Yu. N. Novikov. 14, 986 (1970) [188, 1023 (1969)]

NOVITSKII, G. G.
Isotope Effect in the Fluorescence Spectra of the Ammonium Salts of Uranyl. (E) G. G. Novitskii, A. N. Sevchenko, and D. S. Umreiko. 14, 803 (1970) [187, 1268 (1969)]

NOVOSADOV, B. K.
The Decomposition of Direct Products of Irreducible Representations of Space Groups. (T) B. K. Novosadov, L. K. Saulevich, D. T. Sviridov, and Yu. F. Smirnov. 14, 50 (1969) [184, 82 (1969)]

NOZDRINA, E. N.
The Hyperfine Structure of the EPR Spectra of Cu(II) in Some Oxide Glasses. (E/T) L. D. Bogomolova, V. N. Lazukin, E. N. Nozdrina, and N. V. Petrovykh. 14, 760 (1970) [187, 768 (1969)]

OBUKHOV, A. M.
Integral Invariants in Hydrodynamic Systems. (T) A. M. Obukhov. 14, 32 (1969) [184, 309 (1969)]

OGLOBLINA, I. A.
The Martensitic Phase with Face-Centered Cubic Lattice in Titanium Alloy Containing 5-9% Iron. (E) L. N. Guseva, L. A. Petrova, and I. A. Ogloblina. 14, 367 (1969) [185, 799 (1969)]

OKSAK, A. I.
The Normal Form of Operators in a Fock Space. (T) A. I. Oksak. 14, 101 (1969) [184, 803 (1969)]

OLEVSKII, S. S.
Hardening of Metals by Temporary Lowering of the Temperature during Creep. (E) G. V. Vladimirova, V. A. Likhachev, M. M. Myshlyaev, and S. S. Olevskii. 14, 1020 (1970) [188, 1034 (1969)]

ONISHCHENKO, V. S.
Anomalous Decrease in Friction when Polyethylene Is Bombarded in Vacuo with Certain Atoms and Molecules. (E) E. A. Dukhovskii, V. S. Onishchenko, A. N. Ponomarev, A. A. Silin, and V. L. Tal'roze. 14, 1218 (1970) [189, 1211 (1969)]

OSIKO, V. V.
X-Ray Fluorescence of Rare-Earth Ions in $Y_3Al_5O_{12}$ Crystals. (E) Yu. K. Voron'ko, B. I. Denker, V. V. Osiko, A. M. Prokhorov, and M. I. Timoshechkin. 14, 998 (1970) [188, 1258 (1969)]

OSVENSKII, V. B.
Effect of Doping Impurities on the Anisotropy of Plastic Deformation in GaAs Single Crystals. (E) V. B. Osvenskii, L. P. Kholodnyi, and M. G. Mil'vidskii. 14, 144 (1969) [184, 1084 (1969)]
Effect of Impurities on the Surmounting of High Peierls Barriers by Dislocations. (E/T) V. N. Erofeev, V. I. Nikitenko, and V. B. Osvenskii. 14, 1108 (1970) [189, 513 (1969)]

OTGONSUREN, O.
The Search for Far Transuranium Elements in Ferromanganese Nodules. (E) O. Otgonsuren, V. P. Perelygin, and G. N. Flerov. 14, 1194 (1970) [189, 1200 (1969)]

OVCHARENKO, O. N.
Dimensional Effect in Magnetization of Hard Superconductors. (E) B. G. Lazarev and O. N. Ovcharenko. 14, 1223 (1970) [189, 1218 (1969)]

OVCHINNIKOV, A. A.
Nonradiative Transition with Charge Redistribution in a Polar Medium. (T) A. A. Ovchinnikov and M. Ya. Ovchinnikova. 14, 447 (1969) [186, 76 (1969)]

OVCHINNIKOV, V. M.
Double-Beam Reflection in Crystals and Its Use in Electrooptical Modulators. (T/E) Yu. É. Kamach, E. N. Kozlovskii, V. M. Ovchinnikov, and V. A. Shamburov. 14, 301 (1969) [185, 1285 (1969)]

OVCHINNIKOVA, M. Ya.
Nonradiative Transition with Charge Redistribution in a Polar Medium. (T) A. A. Ovchinnikov and M. Ya. Ovchinnikova. 14, 447 (1969) [186, 76 (1969)]

OVECHKIN, A. P.
Pulsed Lasers as Light Sources for Shadow and Interference Instruments. (E) I. V. Ershov, A. P. Ovechkin, B. T. Fedyushin, A. I. Kharitonov, and Yu. A. Tsvetaev. 14, 1067 (1970) [189, 277 (1969)]

PAFOMOV, V. E.
Radiation Emission of an Electron-Positron Pair. (T) V. E. Pafomov. 14, 688 (1970) [187, 552 (1969)]

PALATNIK, L. S.
Structure and Anomalous Physical Properties of Metallic Islands Condensed on Dielectric Substrates. (E) L. S. Palatnik, B. T. Boiko, A. N. Sinel'nikov, and V. R. Kopach. 14, 1211 (1970) [189, 996 (1969)]

PANIN, V. E.
On the Influence of Alloying a Ni_3Mn Alloy with a Third 3d-Transition Element on Ordering Kinetics. (E) V. E. Panin, V. V. Prushinskii, V. P. Fadin, and L. I. Novak. 14, 1119 (1970) [189, 84 (1969)]

PANTELEEV, V. V.
Heteroepitaxial Growth of Cadmium Sulfide Films. (E) S. A. Aitkhozhin, G. B. Bokii, V. F. Dvoryankin, I. M. Kotelyanskii, and V. V. Panteleev. 14, 1018 (1970) [188, 1032 (1969)]

PANYUSHEVA, Z. A.
Kinetics and Mechanism of the Breakdown of Graphite Materials during Intense Abrasion. (E) L. A. Plutalova, G. B. Finkel'shtein, Z. A. Panyusheva, and L. P. Grigorenko. 14, 269 (1969) [185, 320 (1969)]

PARAIL, V. V.
Excitation of Nonpotential Oscillations in a Solid-State Plasma. (T) A. A. Ivanov, E. Z. Meilikhov, V. V. Parail, and D. A. Frank-Kamenetskii. 14, 652 (1970) [187, 68 (1969)]

PARIISKII, Yu. N.
A Reflecting Radio Telescope with 15" Resolving Power. (E) S. É. Khaikin, N. L. Kaidanovskii, Yu. N. Pariiskii, O. N. Shivris, G. B. Gel'freikh, and A. A. Stotskii. 14, 291 (1969) [185, 775 (1969)]

PARKHOMENKO, P. P.
Optimum Questionnaires with Questions of Unequal Value. (T) P. P. Parkhomenko. 14, 12 (1969) [184, 51 (1969)]

PARTON, V. Z.
Dynamic Problem for a Plane with a Cut. (T) V. Z. Parton and B. A. Kudryavtsev. 14, 282 (1969) [185, 541 (1969)]
Conditions at the End of a Crack. (T/E) L. A. Galin, Ya. B. Fridman, G. P. Cherepanov, E. M. Morozov, and V. Z. Parton. 14, 816 (1970) [187, 754 (1969)]

PASHKOVA, A. V.
A New Lanthanum Oxytungstate $2La_2O_3 \cdot 3WO_3$. (E) T. I. Timchenko, L. V. Petushkova, E. A. Pobedimskaya, and A. V. Pashkova. 14, 188 (1969) [185, 575 (1969)]

PAVLOTSKII, I. P.
The Gibbs Ensemble and Chains of Equations for the Correlation Functions of Weakly Relativistic Systems. (T) I. P. Pavlotskii. 14, 965 (1970) [188, 784 (1969)]

PEKAR, S. I.
High-Pressure Chemical Lasers and Chemical Reactions Stimulated by Light. (T) S. I. Pekar. 14, 691 (1970) [187, 555 (1969)]

PEREL'MAN, M. E.
Alternative Properties of Physical Systems and Spectral Representations in Field Theory. (T) M. E. Perel'man. 14, 775 (1970) [187, 781 (1969)]

PERELYGIN, V. P.
The Search for Far Transuranium Elements in Ferromanganese Nodules. (E) O. Otgonsuren, V. P. Perelygin, and G. N. Flerov. 14, 1194 (1970) [189, 1200 (1969)]

PEREPELKIN, N. F.
Observation of Ionic Sound in a Toroidally-Shaped Plasma during Turbulent Heating. (E) N. F. Perepelkin and S. D. Fanchenko. 14, 1078 (1970) [189, 288 (1969)]

PERKAS, M. D.
Study of the Influence of Cobalt on the Solubility of Molybdenum in Iron-Nickel Martensite. (E) A. F. Edneral, O. P. Zhukov, and M. D. Perkas. 14, 152 (1969) [184, 828 (1969)]

PETRINA, D. Ya.
Equations Arising in the Summation of Perturbation-Theory Series for the Scattering Matrix. (T) S. S. Ivanov and D. Ya. Petrina. 14, 958 (1970) [188, 776 (1969)]

PETROV, A. Z.
Modelling the Paths of Test Bodies in a Gravitational Field. (T) A. Z. Petrov. 14, 597 (1969) [186, 1302 (1969)]

PETROV, B. N.
The Problem of Measuring the Quantity of a Medium in a Closed Volume. (E) B. N. Petrov, V. A. Viktorov, and B. V. Lunkin. 14, 479 (1969) [186, 564 (1969)]
A Contribution to the Theory of Branching Systems. (T) B. N. Petrov and G. A. Stepan'yants. 14, 520 (1969) [186, 783 (1969)]

PETROVA, L. A.
The Martensitic Phase with Face-Centered Cubic Lattice in Titanium Alloy Containing 5-9% Iron. (E) L. N. Guseva, L. A. Petrova, and I. A. Ogloblina. 14, 367 (1969) [185, 799 (1969)]

PETROVSKII, A. B.
Double Uniform Precession Instability in Ferromagnetic Resonance. (T) A. B. Petrovskii. 14, 131 (1969) [184, 817 (1969)]

PETROVSKII, G. T.
Nature of Capture Centers in Quartz Glasses. (E) A. V. Amosov, G. T. Petrovskii, and D. M. Yudin. 14, 983 (1970) [188, 1020 (1969)]

PETROVYKH, N. V.
EPR in Glass Containing Two Transition Elements. Appearance of Cross Relaxation and Spin Diffusion Processes in Some Cobalt-Containing Glasses. (E) L. D. Bogomolova, V. N. Lazukin, and N. V. Petrovykh. 14, 243 (1969) [185, 548 (1969)]
The Hyperfine Structure of the EPR Spectra of Cu(II) in Some Oxide Glasses. (E/T) L. D. Bogomolova, V. N. Lazukin, E. N. Nozdrina, and N. V. Petrovykh. 14, 760 (1970) [187, 768 (1969)]

PETUSHKOVA, L. V.
A New Lanthanum Oxytungstate $2La_2O_3 \cdot 3WO_3$. (E) T. I. Timchenko, L. V. Petushkova, E. A. Pobedimskaya, and A. V. Pashkova. 14, 188 (1969) [185, 575 (1969)]

PIKULIK, L. G.
Polarization of the Induced Radiation of Phthalimide Solutions. (E) A. N. Sevchenko, L. G. Pikulik, L. F. Gladchenko, and A. D. Das'ko. 14, 1003 (1970) [188, 1263 (1969)]

PILIPOVICH, V. A.
Dependence of the Degree of Polarization of Induced Emission in Dyes on the Angle between the Direction of Polarization of the Exciting Light and the Axis of the Resonator. (E/T) A. N. Sevchenko, A. A. Kovalev, and V. A. Pilipovich. 14, 811 (1970) [186, 1039 (1969)]

PIMENOV, Yu. P.
Measurement of the Quantum Conversion Efficiency in Neodymium Glass. (E) E. M. Dianov, B. V. Ershov, Yu. P. Pimenov, and V. B. Fedorov. 14, 53 (1969) [184, 321 (1969)]

PITAEVSKAYA, L. L.
Rate of Propagation of Ultrasound in Argon at Pressures up to 4 kbars and Temperatures from 25 to 200°C. (E) L. L. Pitaevskaya, A. V. Bilevich, and N. B. Isakova. 14, 150 (1969) [186, 1315 (1969)]

PLATOV, Yu. M.
Non-Stationary Radiation Diffusion in Metals. (T/E) L. N. Bystrov, L. I. Ivanov, and Yu. M. Platov. 14, 259 (1969) [185, 309 (1969)]

PLESHCHENKO, E. G.
Formation of Helium by the Irradiation of S49-2 Glass. (E) S. A. Vekshinskii, E. G. Pleshchenko, and L. S. Vekshinskaya. 14, 363 (1969) [185, 795 (1969)]

PLETYUSHKIN, A. A.
Reflection Spectra of Aluminum Nitride. (E/T) V. I. Donetskikh, A. A. Pletyushkin, Yu. V. Popov, N. G. Slavina, and V. V. Sobolev. 14, 1203 (1970) [189, 764 (1969)]

PLUTALOVA, L. A.
Kinetics and Mechanism of the Breakdown of Graphitic Materials during Intense Abrasion. (E) L. A. Plutalova, G. B. Finkel'shtein, Z. A. Panyusheva, and L. P. Grigorenko. 14, 269 (1969) [185, 320 (1969)]

POBEDIMSKAYA, E. A.
A New Lanthanum Oxytungstate $2La_2O_3 \cdot 3WO_3$. (E) T. I. Timchenko, L. V. Petushkova, E. A. Pobedimskaya, and A. V. Pashkova. 14, 188 (1969) [185, 575 (1969)]

POBEDIMSKAYA, E. L.
Crystal Structure of $K_2Mn_2Zn_4Si_4O_{15} = K_2Mn_2Zn_4[SiO_4]_2[Si_2O_7]$. (E) D. Yu. Pushcharovskii, E. L. Pobedimskaya, and N. V. Belov. 14, 294 (1969) [185, 1045 (1969)]

PODNYAKOV, P. G.
Quartz Torsional-Vibration Resonators. (T) P. G. Podnyakov and I. G. Vasin. 14, 377 (1969) [185, 809 (1969)]

POGUTSE, O. P.
Dissipative, Trapped-Particle Instability in a Dense Plasma. (T) B. B. Kadomtsev and O. P. Pogutse. 14, 470 (1969) [186, 553 (1969)]

POLIVANOV, V. V.
Concerning Realization of the Theoretical Limit of Resolution of an Electron Microscope. (E) P. A. Stoyanov, V. V. Moseev, and V. V. Polivanov. 14, 449 (1969) [186, 78 (1969)]

POLOVIN, R. V.
Concerning the Problem of the Kinetic Description of Fast Processes in a Plasma. (T) R. V. Polovin and V. V. Rozhkov. 14, 1082 (1970) [189, 292 (1969)]

POLYANSKAYA, T. M.
Crystal Structure of $Pr_3WO_6Cl_3$. (E/T) T. M. Polyanskaya, S. V. Borisov, and N. V. Belov. 14, 733 (1970) [187, 1043 (1969)]

PONOMAREV, A. N.
Anomalous Decrease in Friction when Polyethylene Is Bombarded in Vacuo with Certain Atoms and Molecules. (E) E. A. Dukhovskii, V. S. Onishchenko, A. N. Ponomarev, A. A. Silin, and V. L. Tal'roze. 14, 1218 (1970) [189, 1211 (1969)]

PONOMAREV, V. I.

The Crystal Structure of $NaNd_3[GeO_4]_2(OH)_2$. (E) A. V. Chichagov, V. S. Kovalenko, V. I. Ponomarev, and N. V. Belov. 14, 1037 (1970) [189, 88 (1969)]

POPOV, M. M.

The Asymptotic Behavior of Certain Subsequences of Eigenvalues of Boundary Value Problems for the Helmholtz Equation in Higher Dimensions. (T) M. M. Popov. 14, 108 (1969) [184, 1076 (1969)]

POPOV, Yu. V.

Reflection Spectra of Aluminum Nitride. (E/T) V. I. Donetskikh, A. A. Pletyushkin, Yu. V. Popov, N. G. Slavina, and V. V. Sobolev. 14, 1203 (1970) [189, 764 (1969)]

POTAPKOV, N. A.

Green's Functions in the Theory of Ferromagnetic Resonance. (T) N. A. Potapkov. 14, 1061 (1970) [189, 81 (1969)]

POTAPOV, L. P.

Field-Ion Microscopy of the Defects in the Crystal Structure of Neutron-Irradiated Tungsten. (E) V. I. Kirienko and L. P. Potapov. 14, 607 (1969) [186, 1309 (1969)]

PROKHOROV, A. M.

Investigation of Optical Breakdown in Air, Induced by Ultrashort Pulses, Using Moving Image Photography and an Image Converter. (E) B. Z. Gorbenko, Yu. A. Drozhbin, S. D. Kaltmazov, A. A. Medvedev, A. M. Prokhorov, and A. M. Tolmachov. 14, 764 (1970) [187, 772 (1969)]

Self-Focusing High-Intensity Light Beams. (T) A. L. Dyshko, V. N. Lugovoi, and A. M. Prokhorov. 14, 976 (1970) [188, 792 (1969)]

X-Ray Fluorescence of Rare-Earth Ions in $Y_3Al_5O_{12}$ Crystals. (E) Yu. K. Voron'ko, B. I. Denker, V. V. Osiko, A. M. Prokhorov, and M. I. Timoshechkin. 14, 998 (1970) [188, 1258 (1969)]

PROLESKOVSKAYA, A. Yu.

The Photocapillary Effect for Germanium. (E) A. I. Bykhovskii, A. Yu. Proleskovskaya, N. N. Novikov, and N. Ya. Gorid'ko. 14, 79 (1969) [184, 85 (1969)]

PROSUROVSKII, D. I.

Cathode and Anode Flares during an Impulse Vacuum Discharge in the Nanosecond Range. (E) S. P. Bugaev, G. A. Mesyats, and D. I. Prosurovskii. 14, 605 (1969) [186, 1067 (1969)]

PRUSHINSKII, V. V.

On the Influence of Alloying a Ni_3Mn Alloy with a Third 3d-Transition Element on Ordering Kinetics. (E) V. E. Panin, V. V. Prushinskii, V. P. Fadin, and L. I. Novak. 14, 1119 (1970) [189, 84 (1969)]

PUKHNACHEV, V. V.

Asymptotic Properties of the Axisymmetric Flow Solution to the Navier-Stokes Equations. (T) V. V. Pukhnachev. 14, 422 (1969) [186, 283 (1969)]

PUSHCHAROVSKII, D. Yu.

Crystal Structure of $K_2Mn_2Zn_4Si_4O_{15} = K_2Mn_2Zn_4[SiO_4]_2[Si_2O_7]$. (E) D. Yu. Pushcharovskii, E. L. Pobedimskaya, and N. V. Belov. 14, 294 (1969) [185, 1045 (1969)]

RAKHIMOV, A. T.

Contraction of a Cylindrical Gas Discharge. (T) A. T. Rakhimov and F. R. Ulinich. 14, 655 (1970) [187, 72 (1969)]

RAMM, A. G.

Solving an Integral Equation of Potential Theory by an Interaction Method. (T) A. G. Ramm. 14, 425 (1969) [186, 62 (1969)]

Some Nonlinear Problems in the Theory of Antenna Synthesis. (T) A. G. Ramm. 14, 532 (1969) [186, 1277 (1969)]

RAPP, N. V.

Relaxation Processes in Linear Polymers. (T) N. V. Rapp. 14, 696 (1970) [187, 81 (1969)]

RASULEV, U. Kh.

Formation of Protonated Ions in the Thermal Ionization of Molecules of Organic Compounds. (E/T) É. Ya. Zandberg and U. Kh. Rasulev. 14, 769 (1970) [187, 777 (1969)]

RATNER, S. B.

Temperature-Time Relationship of the Stimulated-Elasticity Limit of Polymers. (E/T) S. B. Ratner and Yu. I. Brokhin. 14, 1014 (1970) [188, 807 (1969)]

RAVICH, V. N.

Charge Accumulation in Epitaxial p-n Structures of Gallium Arsenide. (E) N. S. Dubrovskaya, B. A. Krasyuk, S. S. Meskin, N. F. Nedel'skii, V. N. Ravich, and V. I. Sobolev. 14, 664 (1970) [187, 298 (1969)]

RAZMANOVA, Z. P.

Crystal Structure of Kurnakovite $Mg_2B_6O_{11} \cdot 15H_2O = 2Mg \cdot [B_3O_3(OH)_5] \cdot 5H_2O$. (E) Z. P. Razmanova, N. M. Rumanova, and N. V. Belov. 14, 1139 (1970) [189, 1003 (1969)]

REBINDER, P. A.

Manifestation of the Adsorption-Induced Loss of Strength Associated with Reversing Sliding Friction. (E) V. D. Evdokimov and P. A. Rebinder. 14, 386 (1969) [185, 1270 (1969)]

Rupture Strength Criteria for Brittle Bodies under Conditions of Torsion, Tension and Torsion, and Compression. (T/E) A. I. Markov, N. V. Mikhailov, and P. A. Rebinder. 14, 374 (1969) [185, 805 (1969)]

Detection of Adsorptive Plasticizing of the Surface Layer of Metal under the Effect of an Active Lubricant in Boundary Lubrication. (E) A. A. Kanaev, V. N. L'vov, S. Ya. Veiler, and P. A. Rebinder. 14, 702 (1970) [187, 314 (1969)]

An Energy Parameter for Vibrocompaction of Powders. (T/E) M. R. Spasskii, I. A. Dobrushina, I. G. Shatalova, E. D. Shchukin, and P. A. Rebinder. 14, 1205 (1970) [189, 767 (1969)]

RODNIKOVA, I. V.

Mass Spectrometer with Electrostatic and Magnetic Prisms. (E) V. M. Kel'man, I. V. Rodnikova, and M. L. Uteev. 14, 155 (1969) [184, 831 (1969)]

ROGACHEVA, É. D.

Mechanism of Avalanche Crystallization of Epsomite. (E/T) É. D. Rogacheva, A. A. Rozenblyum, and A. V. Belyustin. 14, 627 (1970) [187, 88 (1969)]

ROGOV, G. I.

Synthesis and Optical Properties of Crystals of $YAlO_3$ Activated by Nd^{3+} Ions. (E) Kh. S. Bagdasarov, A. A. Kaminskii, and G. I. Rogov. 14, 346 (1969) [185, 1022 (1969)]

ROMANOV, V. E.

An Approximate Method of Determining the Optical Characteristics of Dye Molecules. (T) V. E. Romanov, B. M. Yavorskii, and R. S. Kozma. 14, 772 (1970) [187, 784 (1969)]

ROMANOVA, A. V.

X-Ray Study of the Structure of Liquid Lead. (E) A. V. Romanova and B. A. Mel'nik. 14, 1084 (1970) [189, 294 (1969)]

ROZEN, A. M.

Some Laws Governing Drop Carry Over. (T) A. M. Rozen, S. I. Golub, I. F. Davydov, and G. I. Gostinin. 14, 648 (1970) [187, 318 (1969)]

ROZENBERG, L. D.

Effect of Ultrasound upon the Formation of High-Energy Particle Tracks in Liquid-Hydrogen Bubble Chambers. (E) V. A. Akulichev, L. R. Gavrilov, V. G. Grebinnik, V. A. Zhukov, G. Liebman, A. P. Manych, Yu. I. Rudin, L. D. Rozenberg, and G. I. Selivanov. 14, 1172 (1970) [189, 973 (1969)]

ROZENBLYUM, A. A.

Mechanism of Avalanche Crystallization of Epsomite. (E/T) É. D. Rogacheva, A. A. Rozenblyum, and A. V. Belyustin. 14, 627 (1970) [187, 88 (1969)]

ROZHKOV, V. V.

Concerning the Problem of the Kinetic Description of Fast Processes in a Plasma. (T) R. V. Polovin and V. V. Rozhkov. 14, 1082 (1970) [189, 292 (1969)]

ROZOVSKII, M. S.

Synthesis of Uniaxial Regular Gear Mechanisms by Means of Combinatorial Schemes. (T) M. S. Rozovskii. 14, 114 (1969) [184, 1065 (1969)]

RUD', Yu. V.

On a New Area of Application of Certain Semiconductor Compounds. (E) Yu. V. Rud' and K. V. Sanin. 14, 1087 (1970) [189, 297 (1969)]

RUDAKOV, L. I.

Observation of Plasma Noise during Turbulent Heating. (E) Yu. G. Kalinin, D. N. Lin, L. I. Rudakov, V. D. Ryutov, and V. A. Skoryupin. 14, 1074 (1970) [189, 284 (1969)]

RUDIN, Yu. I.

Effect of Ultrasound upon the Formation of High-Energy Particle Tracks in Liquid-Hydrogen Bubble Chambers. (E) V. A. Akulichev, L. R. Gavrilov, V. G. Grebinnik, V. A. Zhukov, G. Liebman, A. P. Manych, Yu. I. Rudin, L. D. Rozenberg, and G. I. Selivanov. 14, 1173 (1970) [189, 973 (1969)]

RUDNITSKII, Yu. P.

Energy Exchange between Active Centers in Glass. (E) N. S. Belokrinitskii, M. E. Zhabotinskii, A. D. Manuil'skii, Yu. P. Rudnitskii, M. S. Soskin, V. V. Tsapkin, and G. V. Éllert. 14, 276 (1969) [185, 557 (1969)]

RUMANOVA, N. M.

Crystal Structure of Kurnakovite $Mg_2B_6O_{11} \cdot 15H_2O = 2Mg \cdot [B_3O_3(OH)_5] \cdot 5H_2O$. (E) Z. P. Razmanova, N. M. Rumanova, and N. V. Belov. 14, 1139 (1970) [189, 1003 (1969)]

RUSANOV, V. L.

Transport of Heat in a Plasma along a Magnetic Field (Replacement Wave). (E/T) A. A. Ivanov, L. L. Kozorovitskii, and V. L. Rusanov. 14, 126 (1969) [184, 811 (1969)]

RYABOVA, R. V.

New High-Resolution Photographic Emulsions and Their Investigation by Means of Holographic Resolvometry. (E) Yu. A. Bykovskii, A. I. Larkin, A. A. Markilov, R. V. Ryabova, and D. M. Samoilovich. 14, 246 (1969) [185, 552 (1969)]

RYAZANOV, G. V.

A Unified Theory of Elementary Particles. (T) G. V. Ryazanov. 14, 600 (1969) [186, 1306 (1969)]

RYBARSKA, V.

Configuration Representation of Nucleon Interactions in the Superfluid Nuclear Model. (T) V. Rybarska. 14, 218 (1969) [185, 73 (1969)]

RYKOV, A. N.

Absorption Spectra of Diamonds of Intermediate Type. (E) Yu. A. Klyuev, A. N. Rykov, Yu. A. Dudenkov, and V. M. Zubkov. 14, 1133 (1970) [189, 771 (1969)]

RYUTOV, V. D.

Observation of Plasma Noise during Turbulent Heating. (E) Yu. G. Kalinin, D. N. Lin, L. I. Rudakov, V. D. Ryutov, and V. A. Skoryupin. 14, 1074 (1970) [189, 284 (1969)]

SADKOV, Yu. A.

On the Real Value of the Pressure of the Polymorphic Transformation in Iron. (E) L. F. Vereshchagin, A. A. Semerchan, N. N. Kuzin, and Yu. A. Sadkov. 14, 340 (1969) [185, 785 (1969)]

Change of the Electrical Resistance of Rb, Cs, and Ca under Pressure. (E) L. F. Vereshchagin, A. A. Semerchan, N. N. Kuzin, and Yu. A. Sadkov. 14, 557 (1969) [186, 1045 (1969)]

SADOVNIKOV, B. I.

The Impossibility of Crystal Ordering in One-Dimensional Quantum Systems. (T) B. I. Sadovnikov and E. M. Sorokina. 14, 968 (1970) [188, 788 (1969)]

SAGDEEV, R. Z.

A One-Dimensional Nonlinear Instability Model for an Anisotropic Plasma. (T) Yu. A. Berezin and R. Z. Sagdeev. 14, 62 (1969) [184, 570 (1969)]

Paradox in the Diffusion of Plasma in Toroidal Magnetic Traps. (T) R. Z. Sagdeev and A. A. Galeev. 14, 1198 (1970) [189, 1204 (1969)]

SAKHNOVICH, L. A.

The Discrete and Continuous Spectra of the Radial Dirac Equation. (T) L. A. Sakhnovich. 14, 199 (1969) [185, 61 (1969)]

SALANSKII, N. M.

Magnetostriction Instability of a Parametron Employing a Magnetic Thin Film. (E) L. V. Kirenskii, N. M. Salanskii, and V. I. Litvinchuk. 14, 40 (1969) [184, 70 (1969)]

SALGANIK, R. L.

Temperature Dependence of the Rupture Lifetime of Solids. (T) R. L. Salganik. 14, 221 (1969) [185, 76 (1969)]

SAMARIN, A. M.

On the Microinhomogeneity of Pig Iron. (E) A. M. Samarin and V. A. Izmailov. 14, 392 (1969) [185, 1276 (1969)]

SAMARSKII, A. A.

Calculating the Ionization Instability in Low-Temperature Magnetized Plasma. (T) E. P. Velikhov, L. M. Degtyarev, A. A. Samarskii, and A. P. Favorskii. 14, 68 (1969) [184, 578 (1969)]

SAMARSKII, Yu. A.

Mössbauer Effect at Sn-119 Nuclei in Tin Films Deposited at 4.2°K. (E) N. E. Alekseevskii, A. P. Kir'yanov, Yu. A. Samarskii, and V. I. Tsebro. 14, 581 (1969) [186, 1284 (1969)]

SAMOILOVICH, D. M.

Effect of a Pulsed Electric Field on the Formation of the Latent Photographic Image. (E) D. M. Samoilovich and I. V. Ardashev. 14, 58 (1969) [184, 327 (1969)]

New High-Resolution Photographic Emulsions and Their Investigation by Means of Holographic Resolvometry. (E) Yu. A. Bykovskii, A. I. Larkin, A. A. Markilov, R. V. Ryabova, and D. M. Samoilovich. 14, 246 (1969) [185, 552 (1969)]

SAMOILOVICH, M. I.

Investigation of Colored Crystals of Synthetic Quartz. (E) M. I. Samoilovich, L. I. Tsinober, and I. P. Khadzh. 14, 6 (1969) [184, 91 (1969)]

SAMUILOV, E. V.

Thermodynamics of Partially Ionized Hydrogen. (T) E. V. Samuilov. 14, 571 (1969) [186, 1059 (1969)]

SANDITOV, D. S.

Determination of the "Plasticity" Limit of Inorganic Glasses by the Microindentation Method. (T/E) G. M. Bartenev and D. S. Sanditov. 14, 161 (1969) [184, 1091 (1969)]

SANIN, K. V.

On a New Area of Application of Certain Semiconductor Compounds. (E) Yu. V. Rud' and K. V. Sanin. 14, 1087 (1970) [189, 297 (1969)]

SARANTSEV, V. V.

Formation of the N* (3, 3)-Isobar in the Reaction $\pi^-p \to \pi^+\pi^-n$. (T) A. P. Komar, M. M. Makarov, V. V. Sarantsev, and N. S. Gasilova. 14, 74 (1969) [184, 584 (1969)]

SARUMOV, Yu. A.

Experimental Investigation of the Enthalpy of the Chemically Reacting System $N_2O_4 \rightleftharpoons 2NO_2 \rightleftharpoons 2NO + O_2$. (E) A. E. Sheindlin, N. I. Gorbunova, and Yu. A. Sarumov. 14, 523 (1969) [186, 817 (1969)]

SARYCHEV, V. M.

Flow of a Dissociating Gas in the Absence of Local Thermodynamic Equilibrium. (T) V. M. Sarychev. 14, 287 (1969) [185, 1006 (1969)]

SAULEVICH, L. K.

The Decomposition of Direct Products of Irreducible Representations of Space Groups. (T) B. K. Novosadov, L. K. Saulevich, D. T. Sviridov, and Yu. F. Smirnov. 14, 50 (1969) [184, 82 (1969)]

SAVIN, G. N.

Three-Dimensional Doubly-Periodic Problems of Elasticity Theory. (T) G. N. Savin, A. N. Guz', and V. T. Golovchan. 14, 819 (1970) [187, 1016 (1969)]

SAVITSKII, E. M.

Predicting the Types of Reaction Involved in the Formation of Metallic Phases and Estimating Their Range of Homogeneity by Means of an Electronic Computer. (T) E. M. Savitskii, Yu. V. Devingtal', and V. B. Gribulya. 14, 279 (1969) [185, 561 (1969)]

Effect of Mechanical Vibration on the Structure of Cast Niobium-Tin Superconducting Alloys. (E) E. M. Savitskii, B. P. Mikhailov, and V. V. Baron. 14, 1215 (1970) [189, 1000 (1969)]

Composite Superconductors Obtained from Alloys by the Phase Substitution Method. (E) E. M. Savitskii, B. P. Mikhailov, and V. V. Baron. 14, 1229 (1970) [189, 1226 (1969)]

SAVROV, S. D.

Explosion MHD Generator with Superconducting Magnet System. (E) V. A. Kirillin, V. A. Al'tov, E. I. Asinovskii, A. N. Dremin, F. I. Dubovitskii, V. B. Zenkevich, Yu. A. Kuznetsov, E. F. Lebdev, S. D. Savrov, V. V. Sychev, and A. E. Sheindlin. 14, 266 (1969) [185, 316 (1969)]

SAVUTSKII, A. I.

On the Decrease in the Luminescence Decay Time of Europium Benzoylacetonate under the Influence of Hydrostatic Pressure. (E) V. A. Voloshin, A. A. Galkin, and A. I. Savutskii. 14, 1106 (1970) [189, 511 (1969)]

SEBEKIN, B. I.

Long Unsteady Waves in a Rotating Basin. (T) B. I. Sebekin. 14, 641 (1970) [187, 53 (1969)]

SELIVANOV, G. I.

Effect of Ultrasound upon the Formation of High-Energy Particle Tracks in Liquid-Hydrogen Bubble Chambers. (E) V. A. Akulichev, L. R. Gavrilov, V. G. Grebinnik, V. A. Zhukov, G. Liebman, A. P. Manych, Yu. I. Rudin, L. D. Rozenberg, and G. I. Selivanov. 14, 1173 (1970) [189, 973 (1969)]

SEMASHKO, N. N.

Stationary Motion of a Beam of Charged Particles Taking the Natural Space Charge into Account. (T) B. I. Volkov, A. G. Svechnikov, and N. N. Semashko. 14, 1183 (1970) [189, 984 (1969)]

SEMENOV, S. S.

Experimental Investigation of Nonequilibrium Processes behind a Shock Wave in Air and Nitrogen by the Shadow Method. (E) L. A. Vsil'ev, I. V. Ershov, and S. S. Semenov. 14, 553 (1969) [186, 1041 (1969)]

SEMERCHAN, A. A.

On the Real Value of the Pressure of the Polymorphic Transformation in Iron. (E) L. F. Vereshchagin, A. A. Semerchan, N. N. Kuzin, and Yu. A. Sadkov. 14, 340 (1969) [185, 785 (1969)]

Change of the Electrical Resistance of Rb, Cs, and Ca under Pressure. (E) L. F. Vereshchagin, A. A. Semerchan, N. N. Kuzin, and Yu. A. Sadkov. 14, 557 (1969) [186, 1045 (1969)]

SEREBRYANAYA, N. R.

Crystal Structure of Tin Oxide at High Pressure. (E) N. R. Serebryanaya, S. S. Kabalkina, and L. F. Vereshchagin. 14, 672 (1970) [187, 307 (1969)]

SEVCHENKO, A. N.

Isotope Effect in the Fluorescence Spectra of the Ammonium Salts of Uranyl. (E) G. G. Novitskii, A.N. Sevchenko, and D. S. Umreiko. 14, 803 (1970) [187, 1268 (1969)]

Dependence of the Degree of Polarization of Induced Emission in Dyes on the Angle between the Direction of Polarization of the Exciting Light and the Axis of the Resonator. (E/T) A. N. Sevchenko, A. A. Kovalev, and V. A. Pilipovich. 14, 811 (1970) [187, 1039 (1969)]

Polarization of the Induced Radiation of Phthalimide Solutions. (E) A. N. Sevchenko, L. G. Pikulik, L. F. Gladchenko, and A. D. Das'ko. 14, 1003 (1970) [188, 1263 (1969)]

SHABALIN, V. I.

Mechanism of the Fatigue of Metals for Stresses above the Yield Point. (E) V. I. Shabalin. 14, 175 (1969) [184, 1324 (1969)]

SHAL'NEV, K. K.

Effect of Surface Tension on Cavitation Erosion. (E) B. R. Lazarenko, K. K. Shal'nev, I. I. Varga, D. Shebesht'en, L. Balint, M. K. Bologa, and A. F. Derendovskii. 14, 1025 (1970) [188, 1269 (1969)]

SHAMBUROV, V. A.

Double-Beam Reflection in Crystals and Its Use in Electrooptical Modulators. (T/E) Yu. É. Kamach, E. N. Kozlovskii, V. M. Ovchinnikov, and V. A. Shamburov. 14, 301 (1969) [185, 1285 (1969)]

SHAMRAI, V. F.

Crystal Structure of Nb$_3$(Al, Ge). (E) N. V. Ageev, N. E. Alekseevskii, and V. F. Shamrai. 14, 1023 (1970) [188, 1267 (1969)]

SHAPOSHNIKOV, I. G.

Kinetics of Paramagnetic Magnetization. (T) D. I. Kadyrov and I. G. Shaposhnikov. 14, 1058 (1970) [189, 77 (1969)]

SHAPOVALOV, G. K.

On a Method of Solution of the Spatially Homogeneous Boltzmann Equation. (T) G. K. Shapovalov. 14, 400 (1969) [186, 537 (1969)]

SHASHKIN, D. P.

Crystal Structure of Uralborite Ca$_2$[B$_4$O$_4$(OH)$_8$]. (E) D. P. Shashkin, M. A. Simonov, and N. V. Belov. 14, 1044 (1970) [189, 532 (1969)]

SHATALOV, O. P.

Dissociation of Oxygen Molecules by O$_2$−O$_2$ and O$_2$−O Collisions. (E) S. A. Losev and O. P. Shatalov. 14, 227 (1969) [185, 293 (1969)]

SHATALOVA, I. G.

Vibration-Condensation Kinetics of Tungsten Powder. (E) I. A. Dobrushina, M. R. Spasskii, I. G. Shatalova, and E. D. Shchukin. 14, 1125 (1970) [189, 525 (1969)]

An Energy Parameter for Vibrocompaction of Powders. (T/E) M. R. Spasskii, I. A. Dobrushina, I. G. Shatalova, E. D. Shchukin, and P. A. Rebinder. 14, 1205 (1970) [189, 767 (1969)]

SHCHERBININ, P. P.

The Solution of Milne's Problem for the Bhatnagar-Gross-Krook Kinetic Equation. (T) I. P. Stakhanov and P. P. Shcherbinin. 14, 202 (1969) [185, 286 (1969)]

SHCHUKIN, E. D.

Vibration-Condensation Kinetics of Tungsten Powder. (E) I. A. Dobrushina, M. R. Spasskii, I. G. Shatalova, and E. D. Shchukin. 14, 1125 (1970) [189, 525 (1969)]

An Energy Parameter for Vibrocompaction of Powders. (T/E) M. R. Spasskii, I. A. Dobrushina, I. G. Shatalova, E. D. Shchukin, and P. A. Rebinder. 14, 1205 (1970) [189, 767 (1969)]

SHEBESHT'EN, D.

Effect of Surface Tension on Cavitation Erosion. (E) B. R. Lazarenko, K. K. Shal'nev, I. I. Varga, D. Shebesht'en, L. Balint, M. K. Bologa, and A. F. Derendovskii. 14, 1025 (1970) [188, 1269 (1969)]

SHEINDLIN, A. E.

Explosion MHD Generator with Superconducting Magnet System. (E) V. A. Kirillin, V. A. Al'tov, E. I. Asinovskii, A. N. Dremin, F. I. Dubovitskii, V. B. Zenkevich, Yu. A. Kuznetsov, E. F. Lebdev, S. D. Savrov, V. V. Sychev, and A. E. Sheindlin. 14, 266 (1969) [185, 316 (1969)]

Experimental Investigation of the Enthalpy of the Chemically Reacting System $N_2O_4 \rightleftharpoons 2NO_2 \rightleftharpoons 2NO + O_2$. (E) A. E. Sheindlin, N. I. Gorbunova, and Yu. A. Sarumov. 14, 523 (1969) [186, 817 (1969)]

SHEINKMAN, A. V.

Characteristics of Diffuse Scattering of X Rays at the Zone Stage of Aging of Alloy AlAg. (E/T) G. V. Kleshchev, A. V. Sheinkman, D. V. Shumilov, and A. E. Vanin. 14, 796 (1970) [187, 1261 (1969)]

SHEPELEV, Yu. F.

The $[Ge_3O_{10}]$ Radical in Crystals of Composition $La_2Ge_2O_7$. (E) Yu. I. Smolin, Yu. F. Shepelev, and T. V. Upatova. 14, 630 (1970) [186, 322 (1969)]

SHEVCHENKO, I. V.

Principal Spectral Parameters of the Raman Lines of Tetramethyl Silane and Methyl Chlorosilanes. (E) I. V. Shevchenko, I. F. Kovalev, M. G. Voronkov, and E. Ya. Lukevits. 14, 137 (1969) [184, 824 (1969)]

SHIGAEV, V. N.

Automatic Cathode-Ray Tube Scanner. (E) V. F. Borisovskii, N. D. Dikusar, V. V. Ermolaev, A. D. Zlobin, I. N. Kukhtina, I. I. Skryl', A. I. Filippov, V. N. Shigaev, and V. N. Shkundenkov. 14, 256 (1969) [185, 306 (1969)]

SHIL'KRUT, D. I.

A Symmetry Theorem for Shallow Forms of Equilibrium of Geometrically Nonlinear Shallow and Nonshallow Shells. (T) D. I. Shil'krut. 14, 724 (1970) [187, 64 (1969)]

SHIREI, R. A.

Limits of Applicability of the Buger Law in Water Mists (Clouds) in Relation to the Angular Aperture of the Receiver and the Parameters of the Laser Beam. (E) M. A. Kolosov, A. V. Sokolov, L. V. Fedorova, and R. A. Shirei. 14, 800 (1970) [187, 1264 (1969)]

SHITOV, Yu. P.

Radio Emission of Pulsar SR-1919 in the Meter-Wavelength Band. (E/T) Yu. I. Alekseev, V. V. Vitkevich, and Yu. P. Shitov. 14, 623 (1970) [187, 291 (1969)]

New Pulsar PP 0943 and the Major Characteristics of Its Radio Emission. (E) Yu. I. Alekseev, V. V. Vitkevich, V. F. Zhuravlev, and Yu. P. Shitov. 14, 781 (1970) [187, 1019 (1969)]

SHIVRIS, O. N.

A Reflecting Radio Telescope with 15" Resolving Power. (E) S. É. Khaikin, N. L. Kaidanovskii, Yu. N. Pariiskii, O. N. Shivris, G. B. Gel'freikh, and A. A. Stotskii. 14, 291 (1969) [185, 775 (1969)]

SHKUNDENKOV, V. N.

Automatic Cathode-Ray Tube Scanner. (E) V. F. Borisovskii, N. D. Dikusar, V. V. Ermolaev, A. D. Zlobin, I. N. Kukhtina, I. I. Skryl', A. I. Filippov, V. N. Shigaev, and V. N. Shkundenkov. 14, 256 (1969) [185, 306 (1969)]

SHLIOMIS, M. I.

Nature of the Instability of the Interface between Two Liquids in a Constant Field. (T) V. M. Zaitsev and M. I. Shliomis. 14, 1001 (1970) [188, 1261 (1969)]

SHNOL', É. É.

The Problem of the Gravitational Stability of a Dust Cloud. (T) L. G. Khazin and É. É. Shnol'. 14, 322 (1969) [185, 1018 (1969)]

SHOLIN, G. V.

"Calorimetric" Measurement of the Electron Temperature of a Plasma in a Collisionless Shock Wave. (E/T) G. E. Smolkin, E. A. Striganova, and G. V. Sholin. 14, 343 (1969) [185, 788 (1969)]

SHTEINBERG, G. S.

Formation of Large Lunar Craters and Circular Seas. (T/E) G. S. Shteinberg. 14, 3 (1969) [184, 566 (1969)]

SHTERENBERG, L. E.

Synthesis of Diamonds of the "Carbonado" Type. (E) L. F. Vereschchagin, E. N. Yakovlev, T. D. Varfolomeev, V. N. Slesarev, and L. E. Shterenberg. 14, 248 (1969) [185, 555 (1969)]

SHTERN, V. N.

Determination of a Law of Turbulent Viscosity in a Flow Core on the Basis of a Principle of Maximum Stability. (T/E) M. A. Gol'dshtik and V. N. Shtern. 14, 955 (1970) [188, 772 (1969)]

SHUMANOVA, S. P.

The Structure of ZrO_2 with Admixtures of Sc. (E) N. S. Lidorenko, A. S. Kagan, L. A. Bykovskaya, T. V. Efimovskaya, L. A. Lyutsareva, S. P. Chizhik, and S. P. Shumanova. 14, 806 (1970) [187, 791 (1969)]

SHUMILOV, D. V.

Characteristics of Diffuse Scattering of X Rays at the Zone Stage of Aging of Alloy AlAg. (E/T) G. V. Kleshchev, A. V. Sheinkman, D. V. Shumilov, and A. E. Vanin. 14, 796 (1970) [187, 1261 (1969)]

SHUMYATSKAYA, N. G.

Crystal Structure of Tundrite. (E) N. G. Shumyatskaya, V. V. Ilyukhin, A. A. Voronkov, and N. V. Belov. 14, 304 (1969) [185, 1289 (1969)]

SHVARTS, A. S.

Some Problems of Statistical Physics in Strongly Extended Bodies. (T) Yu. S. Tyupkin and A. S. Shvarts. 14, 233 (1969) [185, 299 (1969)]

SIBGATULLIN, N. R.

Nonlinear Relativistic Waves in Highly Compressed Gas. (T) N. R. Sibgatullin. 14, 619 (1970) [187, 531 (1969)]

SILIN, A. A.

Anomalous Decrease in Friction when Polyethylene Is Bombarded in Vacuo with Certain Atoms and Molecules. (E) E. A. Dukhovskii, V. S. Onishchenko, A. N. Ponomarev, A. A. Silin, and V. L. Tal'roze. 14, 1218 (1970) [189, 1211 (1969)]

SIMONOV, M. A.

The Crystalline Structure of Ramsayite $Na_2Ti_2Si_2O_9 = Na_2Ti_2O_3 \cdot [Si_2O_6]$. (E) Ch'in-hang, M. A. Simonov, and N. V. Belov. 14, 516 (1969) [186, 820 (1969)]

Crystal Structure of Uralborite $Ca_2[B_4O_4(OH)_8]$. (E) D. P. Shashkin, M. A. Simonov, and N. V. Belov. 14, 1044 (1970) [189, 532 (1969)]

SIMONOV, V. I.

Crystal Structure of the Synthetic Sodium-Scandium Silicate $Na_3Sc[Si_2O_7]$. (E) S. M. Skshat, V. I. Simonov, and N. V. Belov. 14, 9 (1969) [184, 337 (1969)]

SINEL'NIKOV, A. N.

Structure and Anomalous Physical Properties of Metallic Islands Condensed on Dielectric Substrates. (E) L. S. Palatnik, B. T. Boiko, A. N. Sinel'nikov, and V. R. Kopach. 14, 1211 (1970) [189, 996 (1969)]

SITNIKOV, A. F.

Kinetics of the Release of Energy Stored in Deformed Uranium. (E/T) Yu. N. Golovanov, A. F. Sitnikov, A. A. Tsvetaev, and R. K. Chuzhko. 14, 1208 (1970) [189, 993 (1969)]

SKORYUPIN, V. A.

Observation of Plasma Noise during Turbulent Heating. (E) Yu. G. Kalinin, D. N. Lin, L. I. Rudakov, V. D. Ryutov, and V. A. Skoryupin. 14, 1074 (1970) [189, 284 (1969)]

SKRYL', I. I.

Automatic Cathode-Ray Tube Scanner. (E) V. F. Borisovskii, N. D. Dikusar, V. V. Ermolaev, A. D. Zlobin, I. N. Kukhtina, I. I. Skryl', A. I. Filippov, V. N. Shigaev, and V. N. Shkundenkov. 14, 256 (1969) [185, 306 (1969)]

SKSHAT, S. M.

Crystal Structure of the Synthetic Sodium-Scandium Silicate $Na_3Sc[Si_2O_7]$. (E) S. M. Skshat, V. I. Simonov, and N. V. Belov. 14, 9 (1969) [184, 337 (1969)]

SLAVINA, N. G.

Reflection Spectra of Aluminum Nitride. (E/T) V. I. Donetskikh, A. A. Pletyushkin, Yu. V. Popov, N. G. Slavina, and V. V. Sobolev. 14, 1203 (1970) [189, 764 (1969)]

SLESARAEV, V. N.

Synthesis of Diamonds of the "Carbonado" Type. (E) L. F. Vereshchagin, E. N. Yakovlev, T. D. Varfolomeeva, V. N. Slesarev, and L. E. Shterenberg. 14, 248 (1969) [185, 555 (1969)]

SLYUSAREV, V. A.

Microscopic Theory of a Steady Josephson Current. (T) S. V. Svidzinskii and V. A. Slyusarev. 14, 230 (1969) [185, 296 (1969)]

SMIRNOV, A. I.

Natural Oscillations and Flutter for Cylindrical Sandwich Shells in a Supersonic Gas Flow. (T) A. I. Smirnov. 14, 397 (1969) [186, 533 (1969)]

SMIRNOV, B. M.

Step-by-Step Ionization Constant of Atoms. (T) B. M. Smirnov. 14, 778 (1970) [187, 787 (1969)]

SMIRNOV, Yu. F.

The Decomposition of Direct Products of Irreducible Representations of Space Groups. (T) B. K. Novosadov, L. K. Saulevich, D. T. Sviridov, and Yu. F. Smirnov. 14, 50 (1969) [184, 82 (1969)]

SMOLIN, Yu. I.

The $[Ge_3O_{10}]$ Radical in Crystals of Composition $La_2Ge_2O_7$. (E) Yu. I. Smolin, Yu. F. Shepelev, and T. V. Upatova. 14, 630 (1970) [187, 322 (1969)]

SMOLKIN, G. E.

"Calorimetric" Measurement of the Electron Temperature of a Plasma in a Collisionless Shock Wave. (E/T) G. E. Smolkin, E. A. Striganova, and G. V. Sholin. 14, 343 (1969) [185, 788 (1969)]

SMUSHKOV, I. V.

Secondary Maxima in the Scattering of X-Rays by Finely Divided Polycrystals. (E/T) I. V. Smushkov and V. F. Tkachenko. 14, 250 (1969) [185, 79 (1969)]

SNISAR', V. A.

Scattering of Ions by Crystals as a Function of Initial Ion Energy. (E) V. A. Molchanov, V. A. Snisar', and V. M. Chicherov. 14, 43 (1969) [184, 74 (1969)]

SOBOLEV, B. P.

Optical and Generation Properties of Mixed CdF_2-YF_3 Crystals Activated with Nd^{3+} Ions. (E) Kh. S. Bagdasarov, O. E. Izotova, A. A. Kaminskii, L. Li, and B. P. Sobolev. 14, 939 (1970) [188, 1042 (1969)]

SOBOLEV, V. I.

Charge Accumulation in Epitaxial p-n Structures of Gallium Arsenide. (E) N. S. Dubrovskaya, B. A. Krasyuk, S. S. Meskin, N. F. Nedel'skii, V. N. Ravich, and V. I. Sobolev. 14, 664 (1970) [187, 298 (1969)]

SOBOLEV, V. V.

Albedo of a Planetary Atmosphere. (T) V. V. Sobolev. 14, 1 (1969) [184, 318 (1969)]

Reflection Spectra of Aluminum Nitride. (E/T) V. I. Donetskikh, A. A. Pletyushkin, Yu. V. Popov, N. G. Slavina, and V. V. Sobolev. 14, 1203 (1970) [189, 764 (1969)]

SOBOTOVICH, É. V.

The Problem of the Possible Existence of Super-Heavy Elements in Nature. (T) V. M. Vdovenko and É. V. Sobotovich. 14, 1179 (1970) [189, 980 (1969)]

SOKOLOV, A. V.

Limits of Applicability of the Buger Law in Water Mists (Clouds) in Relation to the Angular Aperture of the Receiver and the Parameters of the Laser Beam. (E) M. A. Kolosov, A. V. Sokolov, L. V. Fedorova, and R. A. Shirei. 14, 800 (1970) [187, 1264 (1969)]

SOLOB'EV, V. A.

Kinetics of Spreading Apart of a Dislocation Polygon Wall. (T) V. A. Solob'ev. 14, 382 (1969) [183, 1037 (1969)]

SOLOV'EV, L. E.

Two-Photon Excitation in Uranyl Crystals by a Ruby Laser. (E) G. N. Lyalin and L. E. Solov'ev. 14, 444 (1969) [186, 73 (1969)]

SOLOV'EV, V. G.

Quadrupole and Octupole One-Phonon States of Nuclei in the Range 174 ≤ A ≤ 188. (T) L. A. Malov, V. G. Solov'ev, and U. M. Fainer. 14, 461 (1969) [186, 299 (1969)]

Octupole States of Even-Even Nuclides in the Range 150 ≤ A ≤ 176. (T/E) L. A. Malov, V. G. Solov'ev, and S. I. Fedorov. 14, 1186 (1970) [189, 987 (1969)]

SOLUNSKII, V. I.

Study of Diffusion of Na^{22} and Ag^{110} on a Mica Surface, and the Criterion for the Validity of the Asymptotic Solutions to the Surface Diffusion Problem. (E/T) V. I. Solunskii and A. A. Dobrikov. 14, 497 (1969) [186, 568 (1969)]

SOROKINA, E. M.

The Impossibility of Crystal Ordering in One-Dimensional Quantum Systems. (T) B. I. Sadovnikov and E. M. Sorokina. 14, 968 (1970) [189, 788 (1969)]

SOSHNIKOV, V. N.

A Relative Motion Model to Describe Cable-Aided Cosmonaut-Vehicle Approach. (T) V. N. Soshnikov. 14, 330 (1969) [185, 1002 (1969)]

SOSKII, M. S.

Holographic Method of Converting Coherent Light Fields. (E/T) M. D. Bondarenko, A. V. Gnatovskii, and M. S. Soskii. 14, 675 (1970) [187, 538 (1969)]

SOSKIN, M. S.

Energy Exchange between Active Centers in Glass. (E) N. S. Belokrinitskii, M. E. Zhabotinskii, A. D. Manuil'skii, Yu. P. Rudnitskii, M. S. Soskin, V. V. Tsapkin, and G. V. Éllert. 14, 276 (1969) [185, 557 (1969)]

SPASSKII, M. R.

Vibration-Condensation Kinetics of Tungsten Powder. (E) I. A. Dobrushina, M. R. Spasskii, I. G. Shatalova, and E. D. Shchukin. 14, 1125 (1970) [189, 525 (1969)]

An Energy Parameter for Vibrocompaction of Powders. (T/E) M. R. Spasskii, I. A. Dobrushina, I. G. Shatalova, E. D. Shchukin, and P. A. Rebinder. 14, 1205 (1970) [189, 767 (1969)]

SPIVAK, I. I.

Effect of Deviations from Stoichiometric Composition on Diffusion-Controlled Processes in Interstitial Phases. (E) R. A. Andrievskii, I. I. Spivak, and A. E. Tsulin. 14, 360 (1969) [185, 792 (1969)]

STAKHANOV, I. P.

The Solution of Milne's Problem for the Bhatnagar-Gross-Krook Kinetic Equation. (T) I. P. Stakhanov and P. P. Shcherbinin. 14, 202 (1969) [185, 286 (1969)]

STANYUKOVICH, K. P.

Motion of a Medium with Ultrarelativistic Velocities in the General Theory of Relativity. (T) K. P. Stanyukovich. 14, 353 (1969) [185, 1030 (1969)]

Tolman's Problem in a Centrally Symmetric Reference System. (T) K. P. Stanyukovich. 14, 547 (1969) [186, 809 (1969)]

The Schwarzschild Metric in a Synchronous Frame of Reference. (T) K. P. Stanyukovich. 14, 657 (1970) [187, 75 (1969)]

STARODUBOV, Ya. D.
On the Effect of Softening in Low-Temperature Creep of Leads in the Superconducting State. (E) I. A. Gindin, B. G. Lazarev, Ya. D. Starodubov, and V. P. Lebedev. 14, 1011 (1970) [188, 803 (1969)]

STEKHANOV, A. I.
The Existence of a Diamond-Like Semiconductor in a Glassy State. (E) N. A. Goryunova, L. B. Zlatkin, Yu. F. Markov, and A. I. Stekhanov. 14, 72 (1969) [184, 582 (1969)]

STEPAN'YANTS, G. A.
A Contribution to the Theory of Branching Systems. (T) B. N. Petrov and G. A. Stepan'yants. 14, 520 (1969) [186, 783 (1969)]

STOLYAROV, G. K.
Concerning the Effectiveness of Large-Scale Systems. (T) G. K. Stolyarov. 14, 1047 (1970) [189, 265 (1969)]

STOTSKII, A. A.
A Reflecting Radio Telescope with 15" Resolving Power. (E) S. É. Khaikin, N. L. Kaidanovskii, Yu. N. Pariiskii, O. N. Shivris, G. B. Gel'freikh, and A. A. Stotskii. 14, 291 (1969) [185, 775 (1969)]

STOYANOV, P. A.
Concerning Realization of the Theoretical Limit of Resolution of an Electron Microscope. (E) P. A. Stoyanov, V. V. Moseev, and V. V. Polivanov. 14, 449 (1969) [186, 78 (1969)]

STRIGANOVA, E. A.
"Calorimetric" Measurement of the Electron Temperature of a Plasma in a Collisionless Shock Wave. (E/T) G. E. Smolkin, E. A. Striganova, and G. V. Sholin. 14, 343 (1969) [185, 788 (1969)]

SUDOVTSOV, A. I.
Allotropic Transformation of Ytterbium in Films Condensed on a Cold Substrate. (E) B. G. Lazarev, V. M. Kuz'menko, A. I. Sudovtsov, and R. F. Bulatova. 14, 77 (1969) [184, 587 (1969)]
The Electrical Resistance Minimum of Lutetium Films. (E) B. G. Lazarev, V. M. Kuz'menko, and A. I. Sudovtsov. 14, 129 (1969) [184, 815 (1969)]

SUKHAREVSKII, B. Ya.
Thermodynamics of the Distribution of Cation Vacancies between the Sublattices in Spinel-Ferrite Solid Solutions. (E/T) B. Ya. Sukharevskii, B. G. Alapin, and I. I. Vishnevskii. 14, 942 (1970) [188, 1045 (1969)]

SUKORUKIKH, V. S.
Diffraction Theory of Knife-Edge and Slit Shadow Photometry. (T) L. A. Vasil'ev, É. P. Kazandzhan, and V. S. Sukhorukikh. 14, 441 (1969) [186, 70 (1969)]

SVECHNIKOV, A. G.
Diffraction by a Bounded Object. (T) A. G. Svechnikov. 14, 26 (1969) [184, 63 (1969)]
Stationary Motion of a Beam of Charged Particles Taking the Natural Space Charge into Account. (T) B. I. Volkov, A. G. Svechnikov, and N. N. Semashko. 14, 1183 (1970) [189, 984 (1969)]

SVIDZINSKII, S. V.
Microscopic Theory of a Steady Josephson Current. (T) S. V. Svidzinskii and V. A. Slyusarev. 14, 230 (1969) [185, 296 (1969)]

SVIRIDOV, D. T.
The Decomposition of Direct Products of Irreducible Representations of Space Groups. (T) B. K. Novosadov, L. K. Saulevich, D. T. Sviridov, and Yu. F. Smirnov. 14, 50 (1969) [184, 82 (1969)]

SYCHEV, V. V.
Explosion MHD Generator with Superconducting Magnet System. (E) V. A. Kirillin, V. A. Al'tov, E. I. Asinovskii, A. N. Dremin, F. I. Dubovitskii, V. B. Zenkevich, Yu. A. Kuznetsov, E. F. Lebdev, S. D. Savrov, V. V. Sychev, and A. E. Sheindlin. 14, 266 (1969) [185, 316 (1969)]

TAFT, V. A.
On the Frequency and Time Characteristics of Systems with Varying Parameters. (T) V. A. Taft and V. Yu. Gorelik. 14, 743 (1970) [187, 1251 (1969)]

TAKIBAEV, Zh. S.
Nature of the Double Modality of the Angular Distribution of Shower Particles in the 10-20 GeV Energy Region. (T) Zh. S. Takibaev. 14, 452 (1969) [186, 80 (1969)]

TAL'ROZE, V. L.
Anomalous Decrease in Friction when Polyethylene Is Bombarded in Vacuo with Certain Atoms and Molecules. (E) E. A. Dukhovskii, V. S. Onishchenko, A. N. Ponomarev, A. A. Silin, and V. L. Tal'roze. 14, 1218 (1970) [189, 1211 (1969)]

TARAN, Yu. N.
Fine Structure of Ceriumated Cast Iron Graphite. (E) Yu. S. Akhmatov, K. P. Bunin, and Yu. N. Taran. 14, 482 (1969) [186, 83 (1969)]

TARAS'EV, G. S.
An Alternate Version of the Plane State of Stress with Finite Elastic Deformations. (T) G. S. Taras'ev. 14, 721 (1970) [187, 61 (1969)]

TAREEVA, E. E.
Consideration of Crystalline Structure in the Theory of Superconductivity. (T) E. E. Tareeva. 14, 1089 (1970) [189, 299 (1969)]

TELEGINA, I. V.
Small-Angle X-Ray Scattering from Neutron-Irradiated Lithium Fluoride. (E) I. V. Telegina and E. V. Kolontsova. 14, 714 (1970) [187, 566 (1969)]

TERENT'EV, V. F.
Concerning the Nature of the Physical Yield Point and Brittle Fracture. (E) V. F. Terent'ev. 14, 253 (1969) [185, 83 (1969)]
Model of Physical Fatigue Limit of Metals and Alloys. (T) V. F. Terent'ev. 14, 273 (1969) [185, 324 (1969)]

TERENT'EVSKII, A. N.
A Possible Origin of the Electron Paramagnetic Resonance Spectrum of Nitrogen Ions in Diamond. (E) V. N. Lazukin and A. N. Terent'evskii. 14, 793 (1970) [187, 1032 (1969)]
Experimental Observation of $^{13}C^{4+}$, $^{29}Si^{4+}$, $^{77}Se^{4+}$, and S^{4+} Ions in a Diamond Lattice Using Electron Paramagnetic Resonance. (E) V. N. Lazukin and A. N. Terent'evskii. 14, 989 (1970) [188, 1026 (1969)]

TIKHOMIROVA, O. A.
Theory of a Regenerative Optron. (T) É. I. Adirovich, A. G. Vishnevetskii, P. I. Knigin, O. A. Tikhomirova, and É. V. Tsibulin. 14, 538 (1969) [186, 799 (1969)]
The Condition for Complete Regeneration in an Optron with a Photoresistor. (E) É. I. Adirovich, P. I. Knigin, O. A. Tikhomirova, and É. V. Tsibulin. 14, 550 (1969) [186, 1037 (1969)]

TIMCHENKO, T. I.
A New Lanthanum Oxytungstate $2La_2O_3 \cdot 3WO_3$. (E) T. I. Timchenko, L. V. Petushkova, E. A. Pobedimskaya, and A. V. Pashkova. 14, 188 (1969) [185, 575 (1969)]

TIMOSHECHKIN, M. I.
X-Ray Fluorescence of Rare-Earth Ions in $Y_3Al_5O_{12}$ Crystals. (E) Yu. K. Voron'ko, B. I. Denker, V. V. Osiko, A. M. Prokhorov, and M. I. Timoshechkin. 14, 998 (1970) [188, 1258 (1969)]

TKACHENKO, V. F.
Secondary Maxima in the Scattering of X Rays by Finely Divided Polycrystals. (E/T) I. V. Smushkov and V. F. Tkachenko. 14, 250 (1969) [185, 79 (1969)]

TODES, O. M.
The Kinetics of Fluctuations and Determination of the Kinetic Coefficients. (T) O. M. Todes. 14, 1116 (1970) [189, 521 (1969)]

TOLMACHOV, A. M.

Investigation of Optical Breakdown in Air, Induced by Ultrashort Pulses, Using Moving Image Photography and an Image Converter. (E) B. Z. Gorbenko, Yu. A. Drozhbin, S. D. Kaitmazov, A. A. Medvedev, A. M. Prokhorov, and A. M. Tolmachov. 14, 764 (1970) [187, 772 (1969)]

TRUBITSYN, V. P.

The Theory of the Shape of Rotating Planets in Hydrostatic Equilibrium. (T) V. N. Zharkov and V. P. Trubitsyn. 14, 513 (1969) [186, 791 (1969)]

TSAPKIN, V. V.

Energy Exchange between Active Centers in Glass. (E) N. S. Belokrinitskii, M. E. Zhabotinskii, A. D. Manuil'skii, Yu. P. Rudnitskii, M. S. Soskin, V. V. Tsapkin, and G. V. Éllert. 14, 276 (1969) [185, 557 (1969)]

TSEBRO, V. I.

Mössbauer Effect at Sn-119 Nuclei in Tin Films Deposited at 4.2°K. (E) N. E. Alekseevskii, A. P. Kir'yanov, Yu. A. Samarskii, and V. I. Tsebro. 14, 581 (1969) [186, 1284 (1969)]

TSENEVA, M. A.

Polymorphous Transformation in Organic Crystals. (E/T) M. A. Tseneva. 14, 236 (1969) [185, 302 (1969)]

TSIBULIN, É. V.

Theory of a Regenerative Optron. (T) É. I. Adirovich, A. G. Vishnevetskii, P. I. Knigin, O. A. Tikhomirova, and É. V. Tsibulin. 14, 538 (1969) [186, 799 (1969)]

The Condition for Complete Regeneration in an Optron with a Photoresistor. (E) É. I. Adirovich, P. I. Knigin, O. A. Tikhomirova, and É. V. Tsibulin. 14, 550 (1969) [186, 1037 (1969)]

TSIKUNOV, V. N.

Generation of Stimulated Radiation in a Dispersive Cavity. (T) B. L. Livshits and V. N. Tsikunov. 14, 473 (1969) [186, 557 (1969)]

TSINOBER, L. I.

Investigation of Colored Crystals of Synthetic Quartz. (E) M. I. Samoilovich, L. I. Tsinober, and I. P. Khadzhi. 14, 6 (1969) [184, 91 (1969)]

TSULIN, A. E.

Effect of Deviations from Stoichiometric Composition on Diffusion-Controlled Processes in Interstitial Phases. (E) R. A. Andrievskii, I. I. Spivak, and A. E. Tsulin. 14, 360 (1969) [185, 792 (1969)]

TSVETAEV, A. A.

Kinetics of the Release of Energy Stored in Deformed Uranium. (E/T) Yu. N. Golovanov, A. F. Sitnikov, A. A. Tsvetaev, and R. K. Chuzhko. 14, 1208 (1970) [189, 993 (1969)]

TSVETAEV, Yu. A.

Pulsed Lasers as Light Sources for Shadow and Interference Instruments. (E) I. V. Ershov, A. P. Ovechkin, B. T. Fedyushin, A. I. Kharitonov, and Yu. A. Tsvetaev. 14, 1067 (1970) [189, 277 (1969)]

TUGOV, I. I.

Possibility of Creating Electron-Positron Pairs in a Vacuum by the Focusing of Laser Radiation. (T) F. V. Bunkin and I. I. Tugov. 14, 678 (1970) [187, 541 (1969)]

TUREVSKAYA, E. P.

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The Problem of the Possible Existence of Super-Heavy Elements in Nature. (T) V. M. Vdovenko and É. V. Sobotovich. 14, 1179 (1970) [189, 980 (1969)]

CHEMICAL PHYSICS

New High-Resolution Photographic Emulsions and Their Investigation by Means of Holographic Resolvometry. (E) Yu. A. Bykovskii, A. I. Larkin, A. A. Markilov, R. V. Ryabova, and D. M. Samoilovich. 14, 246 (1969) [185, 552 (1969)]

Effect of Deviations from Stoichiometric Composition on Diffusion-Controlled Processes in Interstitial Phases. (E) R. A. Andrievskii, I. I. Spivak, and A. E. Tsulin. 14, 360 (1969) [185, 792 (1969)]

Experimental Investigation of the Enthalpy of the Chemically Reacting System $N_2O_4 \rightleftharpoons 2NO_2 \rightleftharpoons 2NO + O_2$. (E) A. E. Sheindlin, N. I. Gorbunova, and Yu. A. Sarumov. 14, 523 (1969) [186, 817 (1969)]

Justification of the Form of the Equation of State Given in Terms of Elementary Functions. (T) A. A. Vasserman, Ya. Z. Kazavchinskii, and O. S. Kalenov. 14, 588 (1969) [186, 1291 (1969)]

The $[Ge_3O_{10}]$ Radical in Crystals of Composition $La_2Ge_2O_7$. (E) Yu. I. Smolin, Yu. F. Shepelev, and T. V. Upatova. 14, 630 (1970) [187, 322 (1969)]

Isotope Effect in the Fluorescence Spectra of the Ammonium Salts of Uranyl. (E) G. G. Novitskii, A. N. Sevchenko, and D. S. Umreiko. 14, 803 (1970) [187, 1268 (1969)]

The Structure of ZrO_2 with Admixtures of Sc. (E) N. S. Lidorenko, A. S. Kagan, L. A. Bykovskaya, T. V. Efimovskaya, L. A. Lyutsareva, S. P. Chizhik, and S. P. Shumanova. 14, 806 (1970) [187, 791 (1969)]

Search for Low-Energy Collective Electron Excitations in the Benzene Ring. (E) L. V. Iogansen and F. A. Uvarov. 14, 1111 (1970) [189, 516 (1969)]

The Problem of the Possible Existence of Super-Heavy Elements in Nature. (T) V. M. Vdovenko and É. V. Sobotovich. 14, 1179 (1970) [189, 980 (1969)]

Destruction of Color Centers of NaCl Single Crystals by Shock Compression. (E) O. B. Yakusheva, V. V. Yakushev, and A. N. Dremin. 14, 1189 (1970) [189, 991 (1969)]

The Search for Far Transuranium Elements in Ferromanganese Nodules. (E) O. Otgonsuren, V. P. Perelygin, and G. N. Flerov. 14, 1194 (1970) [189, 1280 (1969)]

CRYSTAL GROWTH

Investigation of Colored Crystals of Synthetic Quartz. (E) M. I. Samoilovich, L. I. Tsinober, and I. P. Khadzh. 14, 6 (1969) [184, 1 (1969)]

Crystal Structure of the Synthetic Sodium-Scandium Silicate $Na_3Sc[Si_2O_7]$. (E) S. M. Skshat, V. I. Simonov, and N. V. Belov. 14, 9 (1969) [184, 337 (1969)]

Calculation of the Time Necessary for the Formation of an Atmosphere of Impurity Atoms around a Boundary Dislocation. (T) G. M. Gutnikova and B. Ya. Lyubov. 14, 165 (1969) [184, 1095 (1969)]

Synthesis and X-Ray and Thermal Studies of Potassium Rare-Earth Tungstates, $KLn(WO_4)_2$, Ln = Rare-Earth Element. (E) P. V. Klevtsov and L. P. Kozeeva. 14, 185 (1969) [185, 571 (1969)]

Crystal Structure of Tundrite. (E) N. G. Shumyatskaya, V. V. Ilyukhin, A. A. Voronkov, and N. V. Belov. 14, 304 (1969) [185, 1289 (1969)]

Crystal Structure of Sodium Bichromate $Na_2Cr_2O_7 \cdot 2H_2O$. (E) Yu. A. Kharitonov, É. A. Kuz'min, and N. V. Belov. 14, 403 (1969) [186, 96 (1969)]

Factor of Chemical Indifference of Mutually Substituted Atoms in Crystals of Solid Solutions Formed by Intermetallic Compounds. (T) E. S. Makarov. 14, 406 (1969) [186, 313 (1969)]

Sectorial Growth of Cubic Boron Nitride Crystals. (E) N. E. Filonenko, T. P. Nikitina, and N. M. Kamentseva. 14, 633 (1970) [187, 569 (1969)]

Effect of the Growth Rate of Rhombohedra on the External Form of Vertices in Quartz Crystals. (E) V. S. Balitskii, L. A. Samoilovich, and Yu. A. Belyakova. 14, 830 (1970) [188, 89 (1969)]

Crystal Structure of Stephanite Ag_5SbS_4. (E) A. A. Petrunina, B. A. Maksimov, V. V. Ilyukin, and N. V. Belov. 14, 833 (1970) [188, 342 (1969)]

Heteroepitaxial Growth of Cadmium Sulfide Films. (E) S. S. Aitkhozhin, G. B. Bokii, V. F. Dvoryankin, I. M. Kotelyanskii, and V. V. Panteleev. 14, 1018 (1970) [188, 1032 (1969)]

CRYSTALLINE STATE

Investigation of Colored Crystals of Synthetic Quartz. (E) M. I. Samoilovich, L. I. Tsinober, and I. P. Khadzh. 14, 6 (1969) [184, 91 (1969)]

Crystal Structure of the Synthetic Sodium-Scandium Silicate $Na_3Sc[Si_2O_7]$. (E) S. M. Skshat, V. I. Simonov, and N. V. Belov. 14, 9 (1969) [184, 337 (1969)]

Formation of Long-Range Order in Nickel-Chromium Alloys. (E/T) E. Z. Vintaikin and G. G. Urushadze. 14, 84 (1969) [184, 589 (1969)]

Effect of Doping Impurities on the Anisotropy of Plastic Deformation in GaAs Single Crystals. (E) V. B. Osvenskii, L. P. Kholodnyi, and M. G. Mil'vidskii. 14, 144 (1969) [184, 1084 (1969)]

Texture of Acicular Crystals and Crystallographic Orientation of Dendrites in Molybdenum Ingots. (E/T) N. V. Ageev, D. V. Ignatov, and M. M. Kantor. 14, 158 (1969) [184, 1088 (1969)]

Calculation of the Times Necessary for the Formation of an Anmosphere of Impurity Atoms around a Boundary Dislocation. (T) G. M. Gutnikova and B. Ya. Lyubov. 14, 165 (1969) [184, 1095 (1969)]

A New Lanthanum Oxytungstate $2La_2O_3 \cdot 3WO_3$. (E) T. I. Timchenko, L. V. Petushkova, E. A. Pobedimskaya, and A. V. Pashkova. 14, 188 (1969) [185, 575 (1969)]

Polymorphous Transformation in Organic Crystals. (E/T) M. A. Tseneva. 14, 236 (1969) [185, 302 (1969)]

Negative Dispersion of Light in $CaWO_4:Nd^{3+}$ Crystals. (E) N. K. Bel'skii and D. A. Mukhamedova. 14, 240 (1969) [185, 545 (1969)]

Synthesis of Diamonds of the "Carbonado" Type. (E) L. F. Vereshchagin, E. N. Yakovlev, T. D. Varfolomeeva, V. N. Slesarev, and L. E. Shterenberg. 14, 248 (1969) [185, 555 (1969)]

Heat of Ordering for Ni_2Cr Alloy. (E) E. Z. Vintaikin, V. P. Itkin, B. M. Mogutnov, and G. G. Urushadze. 14, 263 (1969) [185, 313 (1969)]

Crystal Structure of $K_2Mn_2Zn_4Si_4O_{15} = K_2Mn_2Zn_4[SiO_4]_2[Si_2O_7]$. (E) D. Yu. Pushcharovskii, E. L. Pobedimskaya, and N. V. Belov. 14, 294 (1969) [185, 1045 (1969)]

Hyperfine Structure of the Bragg Maxima in Mössbauer Spectrography. (E) M. A. Andreev and R. N. Kuz'min. 14, 298 (1969) [185, 1282 (1969)]

Double-Beam Reflection in Crystals and Its Use in Electrooptical Modulators. (T/E) Yu. É. Kamach, E. N. Kozlovskii, V. M. Ovchinnikov, and V. A. Shamburov. 14, 301 (1969) [185, 1285 (1969)]

Crystal Structure of Tundrite. (E) N. G. Shumyatskaya, V. V. Ilyukhin, A. A. Voronkov, and N. V. Belov. 14, 304 (1969) [185, 1289 (1969)]

On the Real Value of the Pressure of the Polymorphic Transformation in Iron. (E) L. F. Vereshchagin, A. A. Semerchan, N. N. Kuzin, and Yu. A. Sadkov. 14, 340 (1969) [185, 785 (1969)]

Synthesis and Optical Properties of Crystals of $YAlO_3$ Activated by Nd^{3+} Ions. (E) Kh. S. Bagdasarov, A. A. Kaminskii, and G. I. Rogov. 14, 346 (1969) [185, 1022 (1969)]

Effect of Deviations from Stoichiometric Composition on Diffusion-Controlled Processes in Interstitial Phases. (E) R. A. Andrievskii, I. I. Spivak, and A. E. Tsulin. 14, 360 (1969) [185, 792 (1969)]

The Martensitic Phase with Face-Centered Cubic Lattice in Titanium Alloy Containing 5-9% Iron. (E) L. N. Guseva, L. A. Petrova, and I. A. Ogloblina. 14, 367 (1969) [185, 799 (1969)]

Kinetics of Spreading Apart of a Dislocation Polygon Wall. (T) V. A. Solob'ev. 14, 382 (1969) [185, 1037 (1969)]

Ordering Processes in Neutron-Irradiated Martensite. (E) V. K. Kritskaya and V. A. Il'ina. 14, 389 (1969) [185, 1273 (1969)]

On the Microinhomogeneity of Pig Iron. (E) A. M. Samarin and V. A. Izmailov. 14, 392 (1969) [185, 1276 (1969)]

Crystal Structure of Sodium Bichromate $Na_2Cr_2O_7 \cdot 2H_2O$. (E) Yu. A. Kharitonov, É. A. Kuz'min, and N. V. Belov. 14, 403 (1969) [186, 96 (1969)]

Factor of Chemical Indifference of Mutually Substituted Atoms in Crystals of Solid Solutions Formed by Intermetallic Compounds. (T) E. S. Makarov. 14, 406 (1969) [186, 313 (1969)]

Model of a Three-Dimensionally Modulated Complex for Explaining X-Ray Diffraction Patterns with Satellites. (T/E) Yu. D. Tyapkin, M. N. Georgiev, and M. V. Dzhibuti. 14, 409 (1969) [186, 316 (1969)]

Proof of the Existence of Charged States of Krypton in the Matrices of Rubidium Halides by Means of the Mössbauer Method. (T/E) V. M. Krasnoperov, A. M. Murin, N. K. Cherezov, and I. A. Yutlandov. 14, 458 (1969) [186, 296 (1969)]

Experimental Test of the Chain Model for the Scattering of Ions by Crystals. (T/E) I. N. Evdokimov, E. S. Mashkova, and V. A. Molchanov. 14, 467 (1969) [186, 549 (1969)]

Effect of Reversible Friction on Dislocation and Vacancy Density in the Surface Layer of a Metal. (E) V. D. Evdokimov and G. E. Movsesov. 14, 491 (1969) [186, 302 (1969)]

Study of Diffusion of Na^{22} and Ag^{110} on a Mica Surface, and the Criterion for the Validity of the Asymptotic Solutions to the Surface Diffusion Problem. (E/T) V. I. Solunskii and A. A. Dobrikov. 14, 497 (1969) [186, 568 (1969)]

The Crystalline Structure of Ramsayite $Na_2Ti_2Si_2O_9 = Na_2Ti_2O_3 \cdot [Si_2O_6]$. (E) Ch'in-hang, M. A. Simonov, and N. V. Belov. 14, 516 (1969) [186, 820 (1969)]

Electron Microscope Study of Artificial Polycrystalline Diamonds, Ballas and Carbonado. (E) Yu. V. Malov. 14, 545 (1969) [186, 807 (1969)]

Field-Ion Microscopy of Defects in the Crystal Structure of Neutron-Irradiated Tungsten. (E) V. I. Kirienko and L. P. Potapov. 14, 607 (1969) [186, 1309 (1969)]

Mechanism of Avalanche Crystallization of Epsomite. (E/T). É. D. Rogacheva, A. A. Rozenblyum, and A. V. Belyustin. 14, 627 (1970) [187, 88 (1969)]

The $[Ge_3O_{10}]$ Radical in Crystals of Composition $La_2Ge_2O_7$. (E) Yu. I. Smolin, Yu. F. Shepelev, and T. V. Upatova. 14, 630 (1970) [187, 322 (1969)]

Charge Accumulation in Epitaxial p-n Structures of Gallium Arsenide. (E) N. S. Dubrovskaya, B. A. Krasyuk, S. S. Meskin, N. F. Nedel'skii, V. N. Ravich, and V. I. Sobolev. 14, 664 (1970) [187, 298 (1969)]

Crystal Structure of Tin Oxide at High Pressure. (E) N. R. Serebryanaya, S. S. Kabalkina, and L. F. Vereshchagin. 14, 672 (1970)] [187, 307 (1969)]

High-Temperature Creep of Silicon Single Crystals. (E) M. M. Myshlyaev and V. I. Nikitenko. 14, 685 (1970) [187, 549 (1969)]

Self-Diffusion of Carbon. (E) E. S. Golo[illegible]na, V. S. Chaplygina, and L. L. Kotova. 14, 705 (1970) [187, 558 (1969)]

Small-Angle X-Ray Scattering from Neutron-Irradiated Lithium Fluoride. (E) I. V. Telegina and E. V. Kolontsova. 14, 714 (1970) [187, 566 (1969)]

Crystal Structure of $Pr_3WO_6Cl_3$. (E/T) T. M. Polyanskaya, S. V. Borisov, and N. V. Belov. 14, 733 (1970) [187, 1043 (1969)]

A Possible Origin of the Electron Paramagnetic Resonance Spectrum of Nitrogen Ions in Diamond. (E) V. N. Lazukin and A. N. Terent'evskii. 14, 793 (1970) [187, 1032 (1969)]

Characteristics of Diffuse Scattering of X Rays at the Zone Stage of Aging of Alloy AlAg. (E/T) G. V. Kleshchev, A. V. Sheinkman, D. V. Shumilov, and A. E. Vanin. 14, 796 (1970) [187, 1261 (1969)]

The Structure of ZrO_2 with Admixtures of Sc. (E) N. S. Lidorenko, A. S. Kagan, L. A. Bykovskaya, T. V. Efimovskaya, L. A. Lyutsareva, S. P. Chizhik, and S. P. Shumanova. 14, 806 (1970) [187, 791 (1969)]

Diamond High-Pressure Cell. (E) S. B. Aspandiyarov and L. F. Vereshchagin. 14, 814 (1970) [187, 1271 (1969)]

Effect of the Growth Rate of Rhombohedra on the External Form of Vertices in Quartz Crystals. (E) V. S. Balitskii, L. A. Samoilovich, and Yu. A. Belyakova. 14, 830 (1970) [188, 89 (1969)]

Crystal Structure of Stephanite Ag_5SbS_4. (E) A. A. Petrunina, B. A. Maksimov, V. V. Ilyukin, and N. V. Belov. 14, 833 (1970) [188, 342 (1969)]

Interpretation of the Absorption Spectrum of a Cesium Uranyl Chloride Crystal. (E) A. I. Komyak and A. N. Sevchenko. 14, 887 (1970) [188, 318 (1969)]

Anomalous Plasticity of the Surface Layers of Semiconducting Crystals. (T) V. P. Alekhin, O. V. Gusev, V. I. Trefilov, and M. Kh. Shorshorov. 14, 894 (1970) [188, 548 (1969)]

On Using the Phenomenon of the Amorphization of Crystals in Order to Explain the Mechanism of Cathodic Sputtering. (T/E) Kh. Zommerfel'dt, E. S. Mashkova, and V. A. Molchanov. 14, 901 (1970) [188, 556 (1969)]

An Extension of the Law Connecting Electron Concentration and the Type of Crystalline Structure. (T) I. M. Chapnik. 14, 914 (1970) [188, 86 (1969)]

Oriented Crystallization on High-Polymer Boundary Layers, Copying the Electric Relief of the Crystalline-Substrate Surface by Virtue of the Electret Mechanism. (E) G. I. Distler and S. A. Kobzareva. 14, 935 (1970) [188, 811 (1969)]

Optical and Generation Properties of Mixed CdF_2-YF_3 Crystals Activated with Nd^{3+} Ions. (E) Kh. S. Bagdasarov, O. E. Izotova, A. A. Kaminskii, L. Li, and B. P. Sobolev. 14, 939 (1970) [188, 1042 (1969)]

Thermodynamics of the Distribution of Cation Vacancies between the Sublattices in Spinel-Ferrite Solid Solutions. (E/T) B. Ya. Sukharevskii, B. G. Alapin, and I. I. Vishnevskii. 14, 942 (1970) [188, 1045 (1969)]

Crystal Structure of Calcium Chondrodite $Ca_5[SiO_4]_2(OH)_2 = Ca(OH)_2 \cdot Ca_2SiO_4$. (E) R. M. Ganiev, Yu. A. Kharitonov, V. V. Ilyukhin, and N. V. Belov. 14, 946 (1970) [188, 1281 (1969)]

The Impossibility of Crystal Ordering in One-Dimensional Quantum Systems. (T) B. I. Sadovnikov and E. M. Sorokina. 14, 968 (1970) [188, 788 (1969)]

Experimental Observation of $^{13}C^{4+}$, $^{28}Si^{4+}$, $^{77}Se^{4+}$, and S^{4+} Ions in a Diamond Lattice Using Electron Paramagnetic Resonance. (E) V. N. Lazukin and A. N. Terent'evskii. 14, 989 (1970) [188, 1026 (1969)]

Absorption of Light in a $CaWO_4:Nd^{3+}$ Crystal with Na^+ Compensation in the 1.06-μ Range. (E) D. A. Mukhamedova. 14, 991 (1970) [188, 1028 (1969)]

X-Ray Fluorescence of Rare-Earth Ions in $Y_3Al_5O_{12}$ Crystals. (E) Yu. K. Voron'ko, B. I. Denker, V. V. Osiko, A. M. Prokhorov, and M. I. Timoshechkin. 14, 998 (1970) [188, 1258 (1969)]

Polarization of the Induced Radiation of Phthalimide Solutions. (E) A. N. Sevchenko, L. G. Pikulik, L. F. Gladchenko, and A. D. Das'ko. 14, 1003 (1970) [188, 1263 (1969)]

Crystal Structure of $Nb_3(Al, Ge)$. (E) N. V. Ageev, N. E. Alekseevskii, and V. F. Shamrai. 14, 1023 (1970) [188, 1267 (1969)]

The Crystal Structure of $NaNd_3[GeO_4]_2(OH)_2$. (E) A. V. Chichagov, V. S. Kovalenko, V. I. Ponomarev, and N. V. Belov. 14, 1037 (1970) [189, 88 (1969)]

New Data on the Structure of CaF_2-TRF_3 Solid Solutions. (E) V. B. Aleksandrov and L. S. Garashina. 14, 1040 (1970) [189, 307 (1969)]

Crystal Structure of Uralborite $Ca_2[B_4O_4(OH)_8]$. (E) D. P. Shashkin, M. A. Simonov, and N. V. Belov. 14, 1044 (1970) [189, 532 (1969)]

Consideration of Crystalline Structure in the Theory of Superconductivity. (T) E. E. Tareeva. 14, 1089 (1970) [189, 299 (1969)]

Interband Transitions in Disordered Systems with a Slowly Varying Random Field. (T) V. L. Bonch-Bruevich. 14, 1101 (1970) [189, 505 (1969)]

Effect of Impurities on the Surmounting of High Peierls Barriers by Dislocations. (E/T) V. N. Erofeev, V. I. Nikitenko, and V. B. Osvenskii. 14, 1108 (1970) [189, 513 (1969)]

Absorption Spectra of Diamonds of Intermediate Type. (E) Yu. A. Klyuev, A. N. Rykov, Yu. A. Dudenkov, and V. M. Zubkov. 14, 1133 (1970) [189, 771 (1969)]

Interpretation of a Vector System by Using One Multiple Peak. (T) É. A. Kuz'min, V. V. Ilyukhin, and N. V. Belov. 14, 1136 (1970) [189, 774 (1969)]

Crystal Structure of Kurnakovite $Mg_2B_6O_{11} \cdot 15H_2O = 2Mg[B_3O_3(OH)_5] \cdot 5H_2O$. (E) Z. P. Razmanova, N. M. Rumanova, and N. V. Belov. 14, 1139 (1970) [189, 1003 (1969)]
Crystal Structure of $3Mg(OCH_3)_2 \cdot MgCl_2 \cdot 10CH_3OH$. (E) R. I. Bochkova, V. P. Golovachev, E. P. Turevskaya, and N. V. Belov. 14, 1143 (1970) [189, 1246 (1969)]
Effect of Crystal Structure on Angular and Energy Distribution of Ions Scattered by a Single Crystal. (E/T) U. A. Arifov and A. A. Aliev. 14, 1166 (1970) [189, 756 (1969)]
Destruction of Color Centers of NaCl Single Crystals by Shock Compression. (E) O. B. Yakusheva, V. V. Yakushev, and A. N. Dremin. 14, 1189 (1970) [189, 991 (1969)]
Structure and Anomalous Physical Properties of Metallic Islands Condensed on Dielectric Substrates. (E) L. S. Palatnik, B. T. Boiko, A. N. Sinel'nikov, and V. P. Kopach. 14, 1211 (1970) [189, 996 (1969)]
Effect of Mechanical Vibration on the Structure of Cast Niobium – Tin Superconducting Alloys. (E) E. M. Savitskii, B. P. Mikhailov, and V. V. Baron. 14, 1215 (1970) [189, 1000 (1969)]
Nucleation of the Crystalline Phase in Supercooled Melts. (E) D. L. Leichkis and N. V. Mikhailov. 14, 1226 (1970) [189, 1222 (1969)]

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Optimum Questionnaires with Questions of Unequal Value. (T) P. P. Parkhomenko. 14, 12 (1969) [184, 51 (1969)]
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The Correcting Capacities of Linear Codes. (T) M. V. Kozlov. 14, 413 (1969) [186, 275 (1969)]
On the Bulgakov Problem of the Accumulation of Perturbations. (T) V. V. Aleksandrov. 14, 416 (1969) [186, 526 (1969)]
A Contribution to the Theory of Branching Systems. (T) B. N. Petrov and G. A. Stepan'yants. 14, 520 (1969) [186, 783 (1969)]
On Self-adaptive Decoding Automata. (T) V. P. Zarovnyi. 14, 635 (1970) [187, 525 (1969)]
Automatic Prognosis of the Course of Diseases by Means of a Digital Computer. (T) S. Ya. Zaslavskii and K. V. Ivanov-Muromskii. 14, 638 (1970) [187, 528 (1969)]
Microcontrol and Fault Diagnosis in Digital Computers. (T) A. F. Volkov, V. A. Vedeshenkov, and V. D. Zenkin. 14, 737 (1970) [187, 750 (1969)]
Optimization of Complex Multiply Connected Systems of High Dimensions. (T) M. V. Meerov and B. L. Litvak. 14, 740 (1970) [187, 1009 (1969)]
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Finite Control of Linear Distributed Systems. (T) A. G. Butkovskii. 14, 836 (1970) [188, 538 (1969)]
Finite Control of Discrete Linear Systems. (T) A. G. Butkovskii. 14, 949 (1970) [188, 762 (1969)]
Differential Games with Information Delay. (T) F. L. Chernous'ko. 14, 952 (1970) [188, 766 (1969)]
Concerning the Effectiveness of Large-Scale Systems. (T) G. K. Stolyarov. 14, 1047 (1970) [189, 265 (1969)]
Finitely Convergent Algorithms for the Solution of Countable Systems of Inequalities, and Their Application in Problems of the Synthesis of Adaptive Systems. (T) V. A. Yakubovich. 14, 1051 (1970) [189, 495 (1969)]
Impossibility of Eliminating Complete Enumeration in Computing Functions from Their Diagrams. (T) M. I. Dekhtyar'. 14, 1146 (1970) [189, 748 (1969)]
Complexity Bounds for the Realization of Monotonic Symmetrical Functions by Means of Formulas in the Basis $\vee, \&, \neg$. (T) L. S. Khasin. 14, 1149 (1970) [189, 752 (1969)]
Application of the Principle of the Maximum to the Calculation of Optimum Equations of Discrete Systems. (T) R. Gabasov and F. M. Kirillova. 14, 1152 (1970) [189, 963 (1969)]

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Elastic-Plastic Stress Distribution in a Plane with an Aperture. (T) B. D. Annin. 14, 88 (1969) [184, 315 (1969)]
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Concerning the Nature of the Physical Yield Point and Brittle Fracture. (E) V. F. Terent'ev. 14, 253 (1969) [185, 83 (1969)]
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Investigation of Inelastic Problems by Reproduction of the Deformation History. (E) A. Ya. Aleksandrov and M. Kh. Akhmetzyanov. 14, 500 (1969) [186, 58 (1969)]
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Intergration of a System of Equations of Elastic Equilibrium of a Plane. (T) I. N. Vekua. 14, 509 (1969) [186, 541 (1969)]
Asymptotic Properties of the Solutions of a Class of Integral Equations Occurring in Elasticity Theory and Mathematical Physics. (T) V. A. Babeshko. 14, 529 (1969) [186, 1273 (1969)]
Consideration of the Piezoelectric Effect in the Theory of Elastic Waves for Crystals of Different Symmetries. (T) V. N. Lyubimov. 14, 567 (1969) [186, 1055 (1969)]
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Preliminary Displacement on Elastic Contact between Solids. (T) N. B. Demkin and I. V. Kragel'skii. 14, 603 (1969) [186, 812 (1969)]
On the Integration of Equilibrium Equations of a Cylindrical Shell. (T) I. N. Vekua. 14, 613 (1969) [186, 787 (1969)]
Torsion of an Elastic Layer by Two Plates. (T) Ya. S. Uflyand. 14, 616 (1969) [186, 1034 (1969)]
Defection of Adsorptive Plasticizing of the Surface Layer of Metal under the Effect of an Active Lubricant in Boundary Lubrication. (E) A. A. Kanaev, V. N. L'vov, S. Ya. Veiler, and P. A. Rebinder. 14, 702 (1970) [187, 314 (1969)]
An Energy Condition for the Growth of Cracks in Elastoplastic Bodies. (T) E. M. Morozov. 14, 717 (1970) [187, 57 (1969)]
An Alternate Version of the Plane State of Stress with Finite Elastic Deformations. (T) G. S. Taras'ev. 14, 721 (1970) [187, 61 (1969)]
A Symmetry Theorem for Shallow Forms of Equilibrium of Geometrically Nonlinear Shallow and Nonshallow Shells. (T) D. I. Shil'krut. 14, 724 (1970) [187, 64 (1969)]
Asymptotic Properties of the Solutions of Some Integral Equations. (T) V. A. Babeshko. 14, 728 (1970) [187, 535 (1969)]
Conditions at the End of a Crack. (T/E) L. A. Galin, Ya. B. Fridman, G. P. Cherepanov, E. M. Morozov, and V. Z. Parton. 14, 816 (1970) [187, 754 (1969)]
Three-Dimensional Doubly Periodic Problems of Elasticity Theory. (T) G. N. Savin, A. N. Guz', and V. T. Golovchan. 14, 819 (1970) [187, 1016 (1969)]
Equivalent Stiffness of a Doubly Periodic Grating Reinforced with Elastic Rings. (T) É. I. Grigolyuk and L. A. Fil'shtinskii. 14, 822 (1970) [187, 1254 (1969)]
Anomalous Plasticity of the Surface Layers of Semiconducting Crystals. (T) V. P. Alekhin, O. V. Gusev, V. I. Trefilov, and M. Kh. Shorshorov. 14, 894 (1970) [188, 548 (1969)]
Low-Temperature Plastic Deformation of the Surface of Silicon Single Crystals. (E/T) V. P. Alekhin, O. V. Gusev, Yu. N. Petrov, V. I. Trefilov, and M. Kh. Shorshorov. 14, 917 (1970) [188, 326 (1969)]
Averaging in Systems of Nonlinear Integro-Differential Equations. (T) A. A. Il'yushin, G. S. Larionov and A. N. Filatov. 14, 931 (1970) [188, 49 (1969)]
Temperature-Time Relationship of the Stimulated-Elasticity Limit of Polymers. (E/T) S. B. Ratner and Yu. I. Brokhin. 14, 1014 (1970) [188, 807 (1969)]

Kinetics of the Release of Energy Stored in Deformed Uranium. (E/T) Yu. N. Golovanov, A. F. Sitnikov, A. A. Tsvetaev, and R. K. Chuzhko. 14, 1208 (1970) [189, 993 (1969)]

Strength Characteristics of Elastomers at Small Deformations. (E) Yu. S. Zuev and G. G. Bobylev. 14, 1221 (1970) [189, 1215 (1969)]

ELECTRICAL DISCHARGES

Cathode and Anode Flares during an Impulsive Vacuum Discharge in the Nanosecond Range. (E) S. P. Bugaev, G. A. Mesyats, and D. I. Prosurovskii. 14, 605 (1969) [186, 1067 (1969)]

Contraction of a Cylindrical Gas Discharge. (T) A. T. Rakhimov and F. R. Ulinich. 14, 655 (1970) [187, 72 (1969)]

Investigation of Optical Breakdown in Air, Induced by Ultrashort Pulses, Using Moving Image Photography and an Image Converter. (E) B. Z. Gorbenko, Yu. A. Drozhbin, S. D. Kaitmazov, A. A. Medvedev, A. M. Prokhorov, and A. M. Tolmachov. 14, 764 (1970) [187, 772 (1969)]

Electric Field at the Electrode Surface at the Cathode Spot of an Arc Discharge. (T) I. I. Beilis, G. A. Lyubimov, and V. I. Rakhovskii. 14, 897 (1970) [188, 552 (1969)]

The Nature of Pearl Lightning. (T) V. F. Minin and F. Kh. Baibulatov. 14, 979 (1970) [188, 795 (1969)]

ELECTRICAL PROPERTIES, EFFECTS, AND ENGINEERING

Properties of Cadmium Telluride p-n Junctions. (E) P. S. Kireev, L. I. Kalugina, and A. V. Vanyukov. 14, 56 (1969) [184, 324 (1969)]

A 112-kOe Superconducting Laboratory Solenoid of Deformable Alloy Wire. (E) B. G. Lazarev, L. S. Lazareva, V. R. Golik, and S. I. Goridov. 14, 82 (1969) [184, 89 (1969)]

The Electrical Resistance Minimum of Lutetium Films. (E) B. B. Lazerev, V. M. Kus'menko, and A. I. Sudovtsov. 14, 129 (1969) [184, 815 (1969)]

Quartz Torsional-Vibration Resonators. (T) P. G. Pozdnyakov and I. G. Vasin. 14, 377 (1969) [185, 809 (1969)]

Nonradiative Transition with Charge Redistribution in a Polar Medium. (T) A. A. Ovchinnikov and M. Ya. Ovchinnikova. 14, 447 (1969) [186, 76 (1969)]

Electrical Structure of Boundary Layers. (T) G. I. Distler. 14, 455 (1969) [186, 293 (1969)]

Change of the Electrical Resistance of Rb, Cs, and Ca under Pressure. (E) L. F. Vereshchagin, A. A. Semerchan, N. N. Kuzin, and Yu. A. Sadkov. 14, 557 (1969) [186, 1045 (1969)]

Effect of Tunneling on the Efficiency of Thermoelectric Devices. (T) N. S. Lidorenko, V. A. Andriyako, L. D. Dudkin, É. L. Nagaev, and O. M. Narva. 14, 591 (1969) [186, 1295 (1969)]

Rayleigh Waves in Gallium Arsenide Semiconductor Piezoelectric Crystals. (T) I. A. Biktorov. 14, 660 (1970) [187, 294 (1969)]

Charge Accumulation in Epitaxial p-n Structures of Gallium Arsenide. (E) N. S. Dubrovskaya, B. A. Krasyuk, S. S. Meskin, N. F. Nedel'skii, V. N. Ravich, and V. I. Sobolev. 14, 664 (1970) 187, 298 (1969)]

The Magnetoresistance and the Hall Effect of Nickel-Copper Thin Films. (E) R. G. Annaev, G. Myalikgulyev, and L. S. Mel'nikova. 14, 758 (1970) [187, 765 (1969)]

The Hyperfine Structure of the ESR Spectra of Cu(II) in Some Oxide Glasses. (E/T) L. D. Bogomolova, V. N. Lazukin, E. N. Nozdrina, and N. V. Petrovykh. 14, 760 (1970) [187, 768 (1969)]

Induced Acceleration of Modulated Current in an Inverted Paramagnetic Substance. (T) E. K. Zavoiskii and V. I. Kurilko. 14, 790 (1970) [187, 1029 (1969)]

Spontaneous Unipolar Charging of Beta-Active "Hot" Aerosol Particles. (T) V. D. Ivanov and V. N. Kirichenko. 14, 859 (1970) [188, 65 (1969)]

Kinetics of Unipolar Charging of Beta-Active "Hot" Particles in an Electric Field. (E) V. N. Kirichenko and V. D. Ivanov. 14, 884 (1970) [188, 315 (1969)]

Electrical Resistance of Surface Layers of Metals and the Mechanism of Seizure. (E) B. I. Kostetskii and O. V. Shul'ga. 14, 908 (1970) [188, 80 (1969)]

ELECTRON AND ION OPTICS

Scattering of Ions by Crystals as a Function of Initial Ion Energy. (E) V. A. Molchanov, V. A. Snisar', and V. M. Chicherov. 14, 43 (1969) [184, 74 (1969)]

Mass Spectrometer with Electrostatic and Magnetic Prisms. (E) V. M. Kel'man, I. V. Rodnikova, and M. L. Uteev. 14, 155 (1969) [184, 831 (1969)]

Detecting Soft X Radiation with Electron-Optical Converters. (E) V. A. Bryzgunov, M. M. Butslov, and M. A. Mokul'skii. 14, 338 (1969) [185, 782 (1969)]

Concerning Realization of the Theoretical Limit of Resolution of an Electron Microscope. (E) P. A. Stoyanov, V. V. Moseev, and V. V. Polivanov. 14, 449 (1969) [186, 78 (1969)]

Electron Microscope Study of Artificial Polycrystalline Diamonds, Ballas and Carbonado. (E) Yu. V. Malov. 14, 545 (1969) [186, 807 (1969)]

Possible Mode of Acceleration and Beam Extraction in an Isochronous Cyclotron. (T) Yu. G. Basargin and R. N. Litunovskii. 14, 585 (1969) [186, 1288 (1969)]

Field-Ion Microscopy of Defects in the Crystal Structure of Neutron-Irradiated Tungsten. (E) V. I. Kirienko and L. P. Potapov. 14, 607 (1969) [186, 1309 (1969)]

Gabor Holograms with a Pure Base Beam. (E/T) A. P. Komar, B. G. Turukhano, and N. Turukhano. 14, 610 (1969) [186, 1312 (1969)]

Shadow Electron-Optical Moiré Patterns Produced by Electrical and Magnetic Microfields. (E) V. N. Gusev and B. A. Krasyuk. 14, 699 (1970) [187, 311 (1969)]

Investigation of Optical Breakdown in Air, Induced by Ultrashort Pulses, Using Moving Image Photography and Image Converter. (E) B. Z. Gorbenko, Yu. A. Drozhbin, S. D. Kaitmazov, A. A. Medvedev, A. M. Prokhorov, and A. M. Tolmachov. 14, 764 (1970) [187, 772 (1969)]

Observation of Ionic Sound in a Toroidally-Shaped Plasma during Turbulent Heating. (E) N. F. Perepelkin and S. D. Fanchenko. 14, 1078 (1970) [189, 288 (1969)]

Stationary Motion of a Beam of Charged Particles Taking the Natural Space Charge into Account. (T) B. I. Volkov, A. G. Svechnikov, and N. N. Semashko. 14, 1183 (1970) [189, 984 (1969)]

ELECTRONICS

General Waveguide Theory and the Ultimate Resolving Power of Multiple-Ray Spectrum Analyzers. (T) L. N. Deryugin and A. V. Chekan. 14, 123 (1969) [184, 807 (1969)]

Automatic Cathode-Ray Tube Scanner. (E) V. F. Borisovskii, N. D. Dikusar, V. V. Ermolaev, A. D. Zlobin, I. N. Kukhtina, I. I. Skryl', A. I. Filippov, V. N. Shigaev, and V. N. Shkundenkov. 14, 256 (1969) [185, 306 (1969)]

ELEMENTARY PARTICLE INTERACTIONS

Nature of the Double Modality of the Angular Distribution of Shower Particles in the 10-20 GeV Energy Region. (T) Zh. S. Takibaev. 14, 452 (1969) [186, 80 (1969)]

Quadrupole and Octupole One-Phonon States of Nuclei in the Range $174 \le A \le 188$. (T) L. A. Malov, V. G. Solov'ev, and U. M. Fainer. 14, 461 (1969) [186, 299 (1969)]

Energy and Intensity in the Multiple Backscattering of Beta Particles from Nuclei of Various Elements. (E) L. M. Boyarshinov. 14, 464 (1969) [186, 545 (1969)]

Experimental Test of the Chain Model for the Scattering of Ions by Crystals. (T/E) I. N. Evdokimov, E. S. Mashkova, and V. A. Molchanov. 14, 467 (1969) [186, 549 (1969)]

Resonance Transfer of Excitation in Collision of Heavy Atoms. (T) M. I. Chibisov. 14, 574 (1969) [186, 1063 (1969)]

Mössbauer Effect at Sn-199 Nuclei in Tin Films Deposited at 4.2°K. (E) N. E. Alekseevskii, A. P. Kir'yanov, Yu. A. Samarskii, and V. I. Tsebro. 14, 581 (1969) [186, 1284 (1969)]

A Unified Theory of Elementary Particles. (T) G. V. Ryazanov. 14, 600 (1969) [186, 1306 (1969)]

Possibility of Creating Electron-Positron Pairs in a Vacuum by the Focusing of Laser Radiation. (T) F. V. Bunkin and I. I. Tugov. 14, 678 (1970) [187, 541 (1969)]

Elementary Particle Theory and the Noninvariant Vacuum. (T) A. A. Grib. 14, 784 (1970) [187, 1022 (1969)]
Angular Distribution in the Elastic Scattering of High-Energy Hadrons. (T/E) S. A. Azimov and G. G. Arushanov. 14, 847 (1970) [188, 53 (1969)]
On the Theory of the Effect of Radiation on the Motion of Electrons in Accelerators. (T) V. N. Baier and B. M. Katkov. 14, 850 (1970) [188, 56 (1969)]
Binding Energy of Two Particles in a State Described by the Schrödinger Equation with a Screened Coulomb Potential. (T) V. L. Sedov. 14, 871 (1970) [188, 77 (1969)]
Semiphenomenological Green's Function of the Optical Electron in a Complex Atom. (T) B. A. Zon, N. L. Manakov, and L. P. Rapoport. 14, 904 (1970) [188, 560 (1969)]
Probability of Double Beta Decay of Nuclei in Regions Far Removed from the Beta-Stable Band. (T) É. E. Berlovich and Yu. N. Novikov. 14, 986 (1970) [188, 1023 (1969)]
Search for Low-Energy Collective Electron Excitations in the Benzene Ring. (E) L. V. Iogansen and F. A. Uvarov. 14, 1111 (1970) [189, 516 (1969)]
Effect of Ultrasound upon the Formation of High-Energy Particle Tracks in Liquid-Hydrogen Bubble Chambers. (E) V. A. Akulichev, L. R. Gavrilov, V. G. Grebinnik, V. A. Zhukov, G. Leibman, A. P. Manych, Yu. I. Rudin, L. D. Rozenberg, and G. I. Selivanov. 14, 1173 (1970) [189, 973 (1969)]
Octupole States of Even-Even Nuclides in the Range 150 ≤ A ≤ 176. (T/E) L. A. Malov, V. G. Solov'ev, and S. I. Fedorov. 14, 1186 (1970) [189, 987 (1969)]

ERRATA
Erratum. 185, 285 (1969)
Errata. 187, 731 (1969)

EXPLOSIONS
Explosion MHD Generator with Superconducting Magnetic System. (E) V. A. Kirillin, V. A. Al'tov, E. I. Asinovskii, A. N. Dremin, F. I. Dubovitskii, V. B. Zenkevich, Yu. A. Kuznetsov, E. F. Lebdev, S. D. Savrov, V. V. Sychev, and A. E. Sheindlin. 14, 266 (1969) [185, 316 (1969)]

FERROMAGNETS AND FERROELECTRICS
Double Uniform Precession Instability in Ferromagnetic Resonance. (T) A. B. Petrovskii. 14, 131 (1969) [184, 817 (1969)]
Green's Functions in the Theory of Ferromagnetic Resonance. (T) N. A. Potapkov. 14, 1061 (1970) [189, 81 (1969)]

FIELD THEORY
Scale Similarity for Random Fields. (T) E. A. Novikov. 14, 104 (1969) [184, 1072 (1969)]
Conformally Flat Gravitational Fields Created by Dustlike Matter. (T) V. I. Vashchuk. 14, 212 (1969) [185, 65 (1969)]
Solving an Integral Equation of Potential Theory by an Iteration Method. (T) A. G. Ramm. 14, 425 (1969) [186, 62 (1969)]
Observable Effects in Relativistic Tensor Gravitation Theories in Flat Space. (T) O. N. Naida. 14, 475 (1969) [186, 560 (1969)]
Alternative Properties of Physical Systems and Spectral Representations in Field Theory. (T) M. E. Perel'man. 14, 775 (1970) [187, 781 (1969)]
An Asymptotic Field Theory in Terms of Operator Jacobian Matrices. (T) Yu. M. Berezanskii and V. D. Koshmanenko. 14, 1064 (1970) [189, 273 (1969)]

FILMS, THIN
Allotropic Transformation of Ytterbium in Films Condensed on a Cold Substrate. (E) B. G. Lazarev, V. M. Kuz'menko, A. I. Sudovtsov, and R. F. Bulatova. 14, 77 (1969) [184, 587 (1969)]
The Electrical Resistance Minimum of Lutetium Films. (E) B. G. Lazerev, V. M. Kus'menko, and A. I. Sudovtsov. 14, 129 (1969) [184, 815 (1969)]
Mössbauer Effect at Sn-119 Nuclei in Tin Films Deposited at 4.2°K. (E) N. E. Alekseevskii, A. P. Kir'yanov, Yu. A. Samarskii, and V. I. Tsebro. 14, 581 (1969) [186, 1284 (1969)]
The Magnetoresistance and the Hall Effect of Nickel–Copper Thin Films. (E) R. G. Annaev, G. Myalikgulyev, and L. S. Mel'nikova. 14, 758 (1970) [187, 765 (1969)]
Photomagnetic Effect in Cadmium Telluride Films Giving Anomalously High Photovoltages. (E) É. I. Adirovich, É. M. Mastov, and Yu. M. Yuabov. 14, 994 (1970) [188, 1254 (1969)]
Heteroepitaxial Growth of Cadmium Sulfide Films. (E) S. A. Aitkhozhin, G. B. Bokii, V. F. Dvoryankin, I. M. Kotelyanskii, and V. V. Panteleev. 14, 1018 (1970) [188, 1032 (1969)]
Structure and Anomalous Physical Properties of Metallic Islands Condensed on Dielectric Substrates. (E) L. S. Palatnik, B. T. Boiko, A. N. Sinel'nikov, and V. R. Kopach. 14, 1211 (1970) [189, 996 (1969)]

FLUID DYNAMICS
Experimental Determination of the Velocity of Propagation of Long Centrifugal Waves Formed in Translational-Rotary Liquid Flow. (E) I. I. Novikov. 14, 17 (1969) [184, 313 (1969)]
A Solution of the One-Dimensional Diffusion Equation in a Bounded Region. (T) N. N. Kochina. 14, 19 (1969) [184, 562 (1969)]
Integral Invariants in Hydrodynamic Systems. (T) A. M. Obukhov. 14, 32 (1969) [184, 309 (1969)]
Lagrangian Description of the Dynamics of Turbulent Motion. (T) B. Ya. Lyubimov. 14, 97 (1969) [184, 1069 (1969)]
The Law of Gas Filtration in a Porous Medium. (E) A. Kh. Mirzadzhanzade, M. A. Guseinzade, A. Sh. Asadov, and G. M. Iskenderov. 14, 99 (1969) [184, 794 (1969)]
Asymmetric Fluid Mechanics and an Averaged Description of Turbulent Flow. (T) V. N. Nikolaevskii. 14, 120 (1969) [184, 1304 (1969)]
Structure of a Flow with Periodic Variation of Momentum. (T) L. A. Virulis, A. L. Genkin, and L. P. Yarin. 14, 192 (1969) [185, 532 (1969)]
Calculation of the Wall Turbulence Constant. (T) M. A. Gol'dshtik and S. S. Kutateladze. 14, 194 (1969) [185, 535 (1969)]
A Note on Unsteady Near-Sonic Flows. (T) E. V. Mamontov. 14, 197 (1969) [185, 538 (1969)]
Application of Dimensional Analysis to Problems of Interplanetary Gas Motion Associated with Solar Flares. (T) V. P. Korobeinikov. 14, 308 (1969) [185, 1254 (1969)]
Collisions between Solid Particles in Liquids. (T) V. P. Myasnikov. 14, 312 (1969) [185, 1258 (1969)]
Some Solutions of the Inhomogeneous Diffusion Equation. (T) N. N. Kochina. 14, 419 (1969) [186, 54 (1969)]
Asymptotic Properties of the Axisymmetric Flow Solution to the Navier-Stokes Equations. (T) V. V. Pukhnachev. 14, 422 (1969) [186, 283 (1969)]
Sudden Increase in Absorption of Laser Radiation and Associated Gasdynamic Effects. (T/E) G. G. Vilenskaya and I. V. Nemchinov. 14, 560 (1969) [186, 1048 (1969)]
Long Unsteady Waves in a Rotating Basin. (T) B. I. Sebekin. 14, 641 (1970) [187, 53 (1969)]
Kinetic Equations for Mixtures of Moderately Dense Gases. (T) A. D. Khon'kin. 14, 644 (1970) [187, 287 (1969)]
On the Convergence of the Rayleigh Method. (T) S. Ya. Gertsenshtein. 14, 746 (1970) [187, 1012 (1969)]
The Onset of Turbulent Motion. (E) V. V. Alekseev and A. A. Speranskaya. 14, 839 (1970) [188, 542 (1969)]
Determination of a Law of Turbulent Viscosity in a Flow Core on the Basis of a Principle of Maximum Stability. (T/E) M. A. Gol'dshtik and V. N. Shtern. 14, 955 (1970) [188, 772 (1969)]
Nature of the Instability of the Interface between Two Liquids in a Constant Field. (T) V. M. Zaitsev and M. I. Shliomis. 14, 1001 (1970) [188, 1261 (1969)]
Determination of Parameters of Small-Scale Atmospheric Turbulence from Combined Observations of Meteors. (T/E) P. B. Babadzhanov and R. Sh. Bibarsov. 14, 1029 (1970) [189, 67 (1969)]

FRICTION AND WEAR

Kinetics and Mechanism of the Breakdown of Graphitic Materials during Intense Abrasion. (E) L. A. Plutalova, G. B. Finkel'shtein, Z. A. Panyusheva, and L. P. Grigorenko. 14, 269 (1969) [185, 320 (1969)]

Correlation of Calculated Estimates of the Wear on Friction Surfaces with Experiment. (E/T) I. V. Kragel'skii, E. F. Nepomnyashchii, and G. M. Kharach. 14, 371 (1969) [185, 802 (1969)]

Manifestation of the Adsorption-Induced Loss of Strength Associated with Reversing Sliding Friction. (E) V. D. Evdokimov and P. A. Rebinder. 14, 386 (1969) [185, 1270 (1969)]

Effect of Reversible Friction on Dislocation and Vacancy Density in the Surface Layer of a Metal. (E) V. D. Evdokimov and G. E. Movsesov. 14, 491 (1969) [186, 302 (1969)]

Anomalous Decrease in Friction When Polyethylene is Bombarded in Vacuo with Certain Atoms and Molecules. (E) E. A. Dukhovskii, V. S. Onishchenko, A. N. Ponomarev, A. A. Silin, and V. L. Tal'roze. 14, 1218 (1970) [189, 1211 (1969)]

GASES

The Law of Gas Filtration in a Porous Medium. (E) A. Kh. Mirzadzhanzade, M. A. Guseinzade, A. Sh. Asadov, and G. M. Iskenderov. 14, 99 (1969) [184, 794 (1969)]

Rate of Propagation of Ultrasound in Argon at Pressures up to 4 Kbars and Temperatures from 25 to 200°C. (E) L. L. Pitaevskaya, A. V. Bilevich, and N. B. Isakova. 14, 150 (1969) [184, 1315 (1969)]

Rebinder Effect in a Hydrogen Atmosphere. (E) G. V. Karpenko, I. I. Vasilenko, M. G. Khitarishvili, and V. S. Fedchenko. 14, 380 (1969) [185, 1034 (1969)]

Thermodynamics of Partially Ionized Hydrogen. (T) E. V. Samuilov. 14, 571 (1969) [186, 1059 (1969)]

Kinetic Equations for Mixtures of Moderately Dense Gases. (T) A. D. Khon'kin. 14, 644 (1970) [187, 287 (1969)]

Contraction of a Cylindrical Gas Discharge. (T) A. T. Rakhimov and F. R. Ulinich. 14, 655 (1970) [187, 72 (1969)]

Calculation of Ground Energy Level of Helium by Means of Trajectory Integrals. (T) A. M. Evseev. 14, 1191 (1970) [189, 1197 (1969)]

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Determination of the "Plasticity" Limit of Inorganic Glasses by the Microindentation Method. (T/E) G. M. Bartenev and D. S. Sanditov. 14, 161 (1969) [184, 1091 (1969)]

EPR in Glass Containing Two Transition Elements. Appearance of Cross Relaxation and Spin Diffusion Processes in Some Cobalt-Containing Glasses. (E) L. D. Bogomolova, V. N. Lazukin, and N. V. Petrovykh. 14, 243 (1969) [185, 548 (1969)]

Energy Exchange between Active Centers in Glass. (E) N. S. Belokrinitskii, M. E. Zhabotinskii, A. D. Manuil'skii, Yu. P. Rudnitskii, M. S. Soskin, V. V. Tsapkin, and G. V. Éllert. 14, 276 (1969) [185, 557 (1969)]

Formation of Helium by the Irradiation of S49-2 Glass. (E) S. A. Vekshinskii, E. G. Pleshchenko, and L. S. Vekshinskaya. 14, 363 (1969) [185, 795 (1969)]

The Hyperfine Structure of the ESR Spectra of Cu(II) in Some Oxide Glasses. (E/T) L. D. Bogomolova, V. N. Lazukin, E. N. Nozdrina, and N. V. Petrovykh. 14, 760 (1970) [187, 768 (1969)]

Nature of Capture Centers in Quartz Glasses. (E) A. V. Amosov, G. T. Petrovskii, and D. M. Yudin. 14, 983 (1970) [188, 1020 (1969)]

HEAT ENGINEERING

Experimental Investigation of the Enthalpy of the Chemically Reacting System $N_2O_4 \rightleftharpoons 2NO_2 \rightleftharpoons 2NO + O_2$. (E) A. E. Sheindlin, N. I. Gorbunova, and Yu. A. Sarumov. 14, 523 (1969) [186, 817 (1969)]

Some Laws Governing Drop Carry Over. (T) A. M. Rozen, S. I. Golub, I. F. Davydov and G. I. Gostinin. 14, 648 (1970) [187, 318 (1969)]

IONS AND IONIZATION

Scattering of Ions by Crystals as a Function of Initial Ion Energy. (E) V. A. Molchanov, V. A. Snisar', and V. M. Chicherov. 14, 43 (1969) [184, 74 (1969)]

Calculating the Ionization Instability in Low-Temperature Magnetized Plasma. (T) E. P. Velikhov, L. M. Degtyarev, A. A. Samarskii, and A. P. Favorskii. 14, 68 (1969) [184, 578 (1969)]

Formation of the $N^*(3, 3)$-Isobar in the Reaction $\pi^-p \rightarrow \pi^+\pi^-n$. (T) A. P. Komar, M. M. Makarov, V. V. Sarantsev, and N. S. Gasilova. 14, 74 (1969) [184, 584 (1969)]

Meteor Luminosity and Ionization. (E/T) P. B. Babadzhanov. 14, 94 (1969) [184, 800 (1969)]

Excitation of Oscillations and Dissociation of Diatomic Molecules in Atom-Molecule Collisions in Gases at High Temperatures. (T) B. V. Kuksenko and S. A. Losev. 14, 215 (1969) [185, 69 (1969)]

Dissociation of Oxygen Molecules by O_2-O_2 and O_2-O Collisions. (E) S. A. Losev and O. P. Shatalov. 14, 227 (1969) [185, 293 (1969)]

Energy Exchange between Active Centers in Glass. (E) N. S. Belokrinitskii, M. E. Zhabotinskii, A. D. Manuil'skii, Yu. P. Rudnitskii, M. S. Soskin, V. V. Tsapkin, and G. V. Éllert. 14, 276 (1969) [185, 557 (1969)]

Electron Paramagnetic Resonance of the Mn^{2+} and Gd^{3+} Ions in Chalcogenide Glasses $TlAsSe_2$ and $TlAsS_2$ in the 2 and 0.8 cm Ranges. (E) I. V. Chepeleva. 14, 356 (1969) [185, 1266 (1969)]

Proof of the Existence of Charged States of Krypton in the Matrices of Rubidium Halides by Means of the Mössbauer Method. (T/E) V. M. Krasnoperov, A. M. Murin, N. K. Cherezov, and I. A. Yutlandov. 14, 458 (1969) [186, 296 (1969)]

Experimental Test of the Chain Model for the Scattering of Ions by Crystals. (T/E) I. N. Evdokimov, E. S. Mashkova, and V. A. Molchanov. 14, 467 (1969) [186, 549 (1969)]

Resonant Charge Transfer of Ions to Group II Atoms of the Mendeleev Table. (T) E. L. Duman. 14, 767 (1970) [187, 775 (1969)]

Formation of Protonated Ions in the Thermal Ionization of Molecules of Organic Compounds. (E/T) É. Ya. Zandberg and U. Kh. Rasulev. 14, 769 (1970) [187, 777 (1969)]

Step-by-Step Ionization Constant of Atoms. (T) B. M. Smirnov. 14, 778 (1970) [187, 787 (1969)]

Optical and Generation Properties of Mixed CdF_2-YF_3 Crystals Activated with Nd^{3+} Ions. (E) Kh. S. Bagdasarov, O. E. Izotova, A. A. Kaminskii, L. Li, and B. P. Sobolev. 14, 939 (1970) [188, 1042 (1969)]

Nature of Capture Centers in Quartz Glasses. (E) A. V. Amosov, G. T. Petrovskii, and D. M. Yudin. 14, 983 (1970) [188, 1020 (1969)]

Experimental Observation of $^{13}C^{4+}$, $^{29}Si^{4+}$, $^{77}Se^{4+}$, and S^{4+} Ions in a Diamond Lattice Using Electron Paramagnetic Resonance. (E) V. N. Lazukin and A. N. Terent'evskii. 14, 989 (1970) [188, 1026 (1969)]

Observation of Ionic Sound in a Toroidally Shaped Plasma during Turbulent Heating. (E) N. F. Perepelkin and S. D. Fanchenko. 14, 1078 (1970) [189, 288 (1969)]

Effect of Crystal Structure on Angular and Energy Distribution of Ions Scattered by a Single Crystal. (E/T) U. A. Arifov and A. A. Aliev. 14, 1166 (1970) [189, 756 (1969)]

Effect of Ultrasound upon the Formation of High-Energy Particle Tracks in Liquid-Hydrogen Bubble Chambers. (E) V. A. Akulichev, L. R. Gavrilov, V. G. Grebinnik, V. A. Zhukov, G. Liebman, A. P. Manych, Yu. I. Rudin, L. D. Rozenberg, and G. I. Selivanov. 14, 1173 (1970) [189, 973 (1969)]

IRRADIATION EFFECTS

Formation of Helium by the Irradiation of S49-2 Glass. (E) S. A. Vekshinskii, E. G. Pleshchenko, and L. S. Vekshinskaya. 14, 363 (1969) [185, 795 (1969)]

Ordering Processes in Neutron-Irradiated Martensite. (E) V. K. Kritskaya and V. A. Il'ina. 14, 389 (1969) [185, 1273 (1969)]

Effect of Electron Irradiation on the State of the Carbon in Martensite. (E) V. K. Kritskaya, V. A. Il'ina, and L. N. Bystrov. 14, 488 (1969) [186, 89 (1969)]

On the Theory of the Effect of Radiation on the Motion of Electrons in Accelerators. (T) V. N. Baier and B. M. Katkov. 14, 850 (1970) [188, 56 (1969)]

On Using the Phenomenon of the Amorphization of Crystals in Order to Explain the Mechanism of Cathodic Sputtering. (T/E) Kh. Zommerfel'dt, E. S. Mashkova, and V. A. Molchanov. 14, 901 (1970) [188, 556 (1969)]

Dependence of Sputtering of a Target on the Angle of Incidence of the Bombarding Particles. (T) O. B. Firsov. 14, 1092 (1970) [189, 302 (1969)]

Effect of Neutron Irradiation on Grain Growth of Uranium during Subsequent Annealing. (E) V. D. Dmitriev and Sh. Sh. Ibragimov. 14, 1123 (1970) [189, 305 (1969)]

Effect of Crystal Structure on Angular and Energy Distribution of Ions Scattered by a Single Crystal. (E/T) U. A. Arifov and A. A. Aliev. 14, 1166 (1970) [189, 756 (1969)]

Anomalous Decrease in Friction When Polyethylene is Bombarded in Vacuo with Certain Atoms and Molecules. (E) E. A. Dukhovskii, V. S. Onishchenko, A. N. Ponomarev, A. A. Silin, and V. L. Tal'roze. 14, 1218 (1970) [189, 1211 (1969)]

LIQUIDS

Collisions between Solid Particles in Liquids. (T) V. P. Myasnikov. 14, 312 (1969) [185, 1258 (1969)]

Measuring the Volume of Fluids in a Hydrostatic High-Pressure Cell with an Internal Heater. (E) I. N. Makarenko, V. A. Ivanov, and S. M. Stishov. 14, 924 (1970) [188, 564 (1969)]

Nature of the Instability of the Interface between Two Liquids in a Constant Field. (T) V. M. Zaitsev and M. I. Shliomis. 14, 1001 (1970) [188, 1261 (1969)]

MAGNETIC PROPERTIES AND EFFECTS

Magnetostriction Instability of a Parametron Employing a Magnetic Thin Film. (E) L. V. Kirenskii, N. M. Salanskii, and V. I. Litvinchuk. 14, 40 (1969) [184, 70 (1969)]

The Effect of Intramolecular Orientational Motion on Magnetic Relaxation in Solids. (E/T) M. R. Zaripov, M. M. Bil'danov, and G. M. Kadievskii. 14, 147 (1969) [184, 1312 (1969)]

Induced Transitions of a Relativistic Electron in a Uniform Constant Magnetic Field. (T) M. M. Denisov. 14, 682 (1970) [187, 545 (1969)]

The Magnetoresistance and the Hall Effect of Nickel–Copper Thin Films. (E) R. G. Annaev, G. Myalikgulyev, and L. S. Mel'nikova. 14, 758 (1970) [187, 765 (1969)]

Induced Acceleration of Modulated Current in an Inverted Paramagnetic Substance. (T) E. K. Zavoiskii and V. I. Kurilko. 14, 790 (1970) [187, 1029 (1969)]

On the Reliability of Stabilized Superconducting Magnetic Systems. (E) V. V. Sychev, V. B. Zenkevich, M. G. Kremlev, and V. A. Al'tov. 14, 911 (1970) [188, 83 (1969)]

Photomagnetic Effect in Cadmium Telluride Films Giving Anomalously High Photovoltages. (E) É. I. Adirovich, É. M. Mastov, and Yu. M. Yuabov. 14, 994 (1970) [188, 1254 (1969)]

Kinetics of Paramagnetic Magnetization. (T) D. I. Kadyrov and I. G. Shaposhnikov. 14, 1058 (1970) [189, 77 (1969)]

Dimensional Effect in Magnetization of Hard Superconductors. (E) B. G. Lazarev and O. N. Ovcharenko. 14, 1223 (1970) [189, 1218 (1969)]

MAGNETOHYDRODYNAMICS

Solution to One Class of MHD Problems with Increased Magnetic-Field Strength. (T) A. V. Getling. 14, 666 (1970) [187, 301 (1969)]

Mechanical Electromagnet as an MHD-Dynamo. (T) I. M. Kirko. 14, 921 (1970) [188, 330 (1969)]

MASERS AND LASERS

New High-Resolution Photographic Emulsions and Their Investigation by Means of Holographic Resolvometry. (E) Yu. A. Bykovskii, A. I. Larkin, A. A. Markilov, R. V. Ryabova, and D. M. Samoilovich. 14, 246 (1969) [185, 552 (1969)]

Two-Photon Excitation in Uranyl Crystals by a Ruby Laser. (E) G. N. Lyalin and L. E. Solov'ev. 14, 444 (1969) [186, 73 (1969)]

On the Possibility of Impregnating Iron with Carbon by the Action of a Laser Light Pulse. (E) L. I. Mirkin. 14, 494 (1969) [186, 305 (1969)]

Sudden Increase in Absorption of Laser Radiation and Associated Gasdynamic Effects. (T/E) G. G. Vilenskaya and I. V. Nemchinov. 14, 560 (1969) [186, 1048 (1969)]

Possibility of Creating Electron-Positron Pairs in a Vacuum by the Focusing of Laser Radiation. (T) F. V. Bunkin and I. I. Tugov. 14, 678 (1970) [187, 541 (1969)]

High-Pressure Chemical Lasers and Chemical Reactions Stimulated by Light. (T) S. I. Pekar. 14, 691 (1970) [187, 555 (1969)]

Limits of Applicability of the Buger Law in Water Mists (Clouds) in Relation to the Angular Aperture of the Receiver and the Parameters of the Laser Beam. (E) M. A. Kolosov, A. V. Sokolov, L. V. Fedorova, and R. A. Shirei. 14, 800 (1970) [187, 1264 (1969)]

Pulsed Lasers As Light Sources for Shadow and Interference Instruments. (E) I. V. Ershov, A. P. Ovechkin, B. T. Fedyushin, A. I. Kharitonov, and Yu. A. Tsvetaev. 14, 1067 (1970) [189, 277 (1969)]

Plastic Deformation of Metals Caused by a 10^{-8} sec Laser Pulse. (E) L. I. Mirkin. 14, 1128 (1970) [189, 528 (1969)]

MATHEMATICAL PHYSICS

A Solution of the One-Dimensional Diffusion Equation in a Bounded Region. (T) N. N. Kochina. 14, 19 (1969) [184, 562 (1969)]

Invariant Description of the Canonical Operator of V. P. Maslov. (T) V. S. Buslaev. 14, 23 (1969) [184, 59 (1969)]

Diffraction by a Bounded Object. (T) A. G. Sveshnikov. 14, 26 (1969) [184, 63 (1969)]

The Decomposition of Direct Products of Irreducible Representations of Space Groups. (T) B. K. Novosadov, L. K. Saulevich, D. T. Sviridov, and Yu. F. Smirnov. 14, 50 (1969) [184, 82 (1969)]

The Normal Form of Operators in a Fock Space. (T) A. I. Oksak. 14, 101 (1969) [184, 803 (1969)]

Scale Similarity for Random Fields. (T) E. A. Novikov. 14, 104 (1969) [184, 1072 (1969)]

The Asymptotic Behavior of Certain Subsequences of Eigenvalues of Boundary Value Problems for the Helmholtz Equation in Higher Dimensions. (T) M. M. Popov. 14, 108 (1969) [184, 1076 (1969)]

Parametrization Method in Perturbation Theory for a System with SR-Symmetry. (T) V. I. Cherepanov. 14, 134 (1969) [184, 820 (1969)]

The Solution of Milne's Problem for the Bhatnagar-Gross-Krook Kinetic Equation. (T) I. P. Stakhanov and P. P. Shcherbinin. 14, 202 (1969) [185, 286 (1969)]

Configuration Representation of Nucleon Interactions in the Superfluid Nuclear Model. (T) V. Rybarska. 14, 218 (1969) [185, 73 (1969)]

Diamagnetic Plasmoid in the Field of a Magnetic Dipole. (T) Vo Khon An' and B. A. Tverskoi. 14, 224 (1969) [185, 289 (1969)]

Microscopic Theory of a Steady Josephson Current. (T) S. V. Svidzinskii and V. A. Slyusarev. 14, 230 (1969) [185, 296 (1969)]

The Second Homogeneous Imperfect-Thermal-Contact Boundary-Value Problem. (T) A. M. Abasov. 14, 315 (1969) [185, 1010 (1969)]

Contour Integral Representation of Normal Wave Expansions. (T) P. E. Krasnushkin. 14, 318 (1969) [185, 1014 (1969)]

The Problem of the Gravitational Stability of a Dust Cloud. (T) L. G. Khazin and É. É. Shnol'. 14, 322 (1969) [185, 1018 (1969)]

Expansion in Normal Waves in a Spherically Stratified Medium. (T) P. E. Krasnushkin. 14, 326 (1969) [185, 1262 (1969)]

On a Method of Solution of the Spatially Homogeneous Boltzmann Equation. (T) G. K. Shapovalov. 14, 400 (1969) [186, 537 (1969)]

Solving an Integral Equation of Potential Theory by an Iteration Method. (T) A. G. Ramm. 14, 425 (1969) [186, 62 (1969)]

A Nonstationary Problem of Thermal Conductivity in a Two-Layer Cylinder. (T) A. S. Umanskii, V. M. Dubner, and Yu. A. Gorshkov. 14, 428 (1969) [186, 66 (1969)]
Study of Diffusion of Na^{22} and Ag^{110} on a Mica Surface, and the Criterion for the Validity of the Asymptotic Solutions to the Surface Diffusion Problem. (E/T) V. I. Solunskii and A. A. Dobrikov. 14, 497 (1969) [186, 568 (1969)]
Integration of a System of Equations of Elastic Equilibrium of a Plane. (T) I. N. Vekua. 14, 509 (1969) [186, 541 (1969)]
Variational Method for Solving a Wave-Propagation Boundary-Value Problem. (T) V. I. Koroza. 14, 526 (1969) [186, 795 (1969)]
Asymptotic Properties of the Solutions of a Class of Integral Equations Occurring in Elasticity Theory and Mathematical Physics. (T) V. A. Babeshko. 14, 529 (1969) [186, 1273 (1969)]
Some Nonlinear Problems in the Theory of Antenna Synthesis. (T) A. G. Ramm. 14, 532 (1969) [186, 1277 (1969)]
A Nonequilibrium Statistical Operator in the Kinetics of Irreversible Processes with Small Energy Transfer. (T) V. P. Kalashnikov. 14, 542 (1969) [186, 803 (1969)]
Tolman's Problem in a Centrally Symmetric Reference System. (T) K. P. Stanyukovich. 14, 547 (1969) [186, 809 (1969)]
Dynamical Theory of the Regenerative Optron. (T) É. I. Adirovich, A. G. Vishnevetskii, and P. M. Karageorgii-Alkalaev. 14, 578 (1969) [186, 1281 (1969)]
Justification of the Form of the Equation of State Given in Terms of Elementary Functions. (T) A. A. Vasserman, Ya. Z. Kazavchinskii, and O. S. Kalenov. 14, 588 (1969) [186, 1291 (1969)]
On the Integration of Equilibrium Equations of a Cylindrical Shell. (T) I. N. Vekua. 14, 613 (1969) [186, 787 (1969)]
The Schwarzschild Metric in a Synchronous Frame of Reference. (T) K. P. Stanyukovich. 14, 657 (1970) [187, 75 (1969)]
Asymptotic Properties of the Solutions of Some Integral Equations. (T) V. A. Babeshko. 14, 728 (1970) [187, 535 (1969)]
Method of Eigenfunctions for Incorrectly Posed Synthesis Problem of a Linear Emitter. (T) L. D. Bakhrakh and S. D. Kremenetskii. 14, 749 (1970) [187, 758 (1969)]
On the Reduction of a Certain Class of Integral Equations of the First Kind to Equations of the Second Kind. (T) Ya. N. Fel'd. 14, 751 (1970) [187, 761 (1969)]
Asymptotic Expansions in the Theory of Diffraction of a Plane Wave by a Strip. (T) P. Ya. Ufimtsev. 14, 755 (1970) [187, 1257 (1969)]
The Method of Successive Approximations for Incorrectly Formulated Problems in the Theory of the Synthesis of Antenna Systems. (T) L. D. Bakhrakh, and S. D. Kremenetskii. 14, 808 (1970) [187, 1035 (1969)]
The Calculation of Reflection and Transmission Coefficients of Electromagnetic Waves for a Spherically Laminated Anisotropic Layer by the Method of Impedance and Field Scalings. (T) P. E. Krasnushkin and R. B. Baibulatov. 14, 841 (1970) [188, 300 (1969)]
The Asymptotic Behavior of the Wave Function for a Quasi-Stationary State. (T) A. A. Arsen'ev. 14, 845 (1970) [188, 545 (1969)]
Bloch-Functions of a Relativistic Charged Particle in a Magnetic Field. (T) I. A. Malkin and V. I. Man'ko. 14, 891 (1970) [188, 322 (1969)]
Semiphenomenological Green's Function of the Optical Electron in a Complex Atom. (T) B. A. Zon, N. L. Manakov, and L. P. Rapoport. 14, 904 (1970) [188, 560 (1969)]
Averaging in Systems of Nonlinear Integro-Differential Equations. (T) A. A. Il'yushin, G. S. Larionov, and A. N. Filatov. 14, 931 (1970) [188, 49 (1969)]
Equations Arising in the Summation of Perturbation-Theory Series for the Scattering Matrix. (T) S. S. Ivanov and D. Ya. Petrina. 14, 958 (1970) [188, 776 (1969)]
Equation of Transport of a Passive Impurity by Filtration Movement. (T) A. B. Kazanskii. 14, 961 (1970) [188, 780 (1969)]
The Gibbs Ensemble and Chains of Equations for the Correlation Functions of Weakly Relativistic Systems. (T) I. P. Pavlotskii. 14, 965 (1970) [188, 784 (1969)]
The Impossibility of Crystal Ordering in One-Dimensional Quantum Systems. (T) B. I. Sadovnikov and E. M. Sorokina. 14, 968 (1970) [188, 788 (1969)]
Trace Equation for a Three-Particle System. (T) V. S. Buslaev and S. P. Merkur'ev. 14, 1055 (1970) [189, 269 (1969)]
Green's Functions in the Theory of Ferromagnetic Resonance. (T) N. A. Potapkov. 14, 1061 (1970) [189, 81 (1969)]
An Asymptotic Field Theory in Terms of Operator Jacobian Matrices. (T) Yu. M. Berezanskii and V. D. Koshmanenko. 14, 1064 (1970) [189, 273 (1969)]
Asymptotic Form of the Correlation Functions in the Critical Region. (T) É. A. Arinshtein. 14, 1098 (1970) [189, 502 (1969)]
The Kinetics of Fluctuations of the Kinetic Coefficients. (T) O. M. Todes. 14, 1116 (1970) [189, 521 (1969)]
Interpretation of a Vector System by Using One Multiple Peak. (T) É. A. Kuz'min, V. V. Ilyukhin, and N. V. Belov. 14, 1136 (1970) [187, 774 (1969)]
Complexity Bounds for the Realization of Monotonic Symmetrical Functions by Means of Formulas in the Basis V, & , ¬ . (T) L. S. Khasin. 14, 1149 (1970) [189, 752 (1969)]
Variational Estimate of Upper and Lower Bounds of the Coefficients of Polarizability in the Theory of Pinhole Diffraction. (T) R. F. Fikhmanas and P. Sh. Fridberg. 14, 1155 (1970) [189, 969 (1969)]
Solution of the Cauchy Problem and Its Asymptotic Behavior for t → ∞, for the Linearized Equations of a Rotating Viscous Fluid. (T) V. N. Maslennikova. 14, 1158 (1970) [189, 1189 (1969)]
The Velocity of a Wave Front. (T) Yu. E. Murakhver. 14, 1161 (1970) [189, 1193 (1969)]
Perturbation Theory for Spin Green's Functions. (T) D. I. Kadyrov. 14, 1170 (1970) [189, 760 (1969)]
Stochastic "Heating" of a Nonlinear Wave. (T) N. N. Filonenko. 14, 1201 (1970) [189, 1208 (1969)]

MECHANICAL ENGINEERING

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Construction of Automatic Machines and Their Efficiency. (T) I. I. Artobolevskii, D. Ya. Il'inskii, and I. I. Kapustin. 14, 205 (1969) [185, 282 (1969)]
Optimum Synthesis of Automatic Machines. (T) I. I. Artobolevskii, D. Ya. Il'inskii, and I. I. Kapustin. 14, 209 (1969) [185, 528 (1969)]
An Iteration Procedure for Calculating the Characteristic Criterion of a Periodic Marginal Motion of a Machine Unit. (T) I. I. Artobolevskii and V. S. Loshchinin. 14, 438 (1969) [186, 529 (1969)]

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The Variational Principle and the Equations of State for Continuous Media. (T) V. A. Zhelnorovich. 14, 29 (1969) [184, 55 (1969)]
Stability of Second-Order Dynamic Systems. (T) K. F. Voitsekhovskaya. 14, 111 (1969) [184, 1061 (1969)]
Synthesis of Uniaxial Regular Gear Mechanisms by Means of Combinatorial Schemes. (T) M. S. Rozovskii. 14, 114 (1969) [184, 1065 (1969)]
An Inverse Problem in the Theory of Diffraction. (T) G. M. Malyuzhinets. 14, 118 (1969) [184, 1301 (1969)]
The Discrete and Continuous Spectra of the Radial Dirac Equation. (T) L. A. Sakhnovich. 14, 199 (1969) [185, 61 (1969)]
A Relative Motion Model to Describe Cable-Aided Cosmonaut-Vehicle Approach. (T) V. N. Soshnikov. 14, 330 (1969) [185, 1002 (1969)]
Integral Conservation Laws for Continuous Media in the General Theory of Relativity. (T) V. A. Zhelnorovich. 14, 432 (1969) [186, 50 (1969)]
Characteristic Criterion for Asymptotically Stable Limiting Motion of a Mechanical Apparatus. (T) I. I. Artobolevskii and V. S. Loshchinin. 14, 435 (1969) [186, 279 (1969)]

An Iteration Procedure for Calculating the Characteristic Criterion of a Periodic Marginal Motion of a Machine Unit. (T) I. I. Artobolevskii and V. S. Loshchinin. 14, 438 (1969) [186, 529 (1969)]

Reaction of the Ground on a Vibrating Rolling Wheel with an Elastic Tire. (T) V. S. Gozdek. 14, 536 (1969) [186, 1031 (1969)]

Inertial Motion of a Uniformly Strained Body. (T) V. G. Nevzglyadov. 14, 594 (1969) [186, 1298 (1969)]

Modelling the Paths of Test Bodies in a Gravitational Field. (T) A. Z. Petrov. 14, 597 (1969) [186, 1302 (1969)]

A Symmetry Theorem for Shallow Forms of Equilibrium of Geometrically Nonlinear Shallow and Nonshallow Shells. (T) D. I. Shil'krut. 14, 724 (1970) [187, 64 (1969)]

Vibrational Relaxation of Oscillators with Near Frequencies. (T) E. I. Dashevskaya. 14, 787 (1970) [187, 1025 (1969)]

Three-Dimensional Doubly Periodic Problems of Elasticity Theory. (T) G. N. Savin, A. N. Guz', and V. T. Golovchan. 14, 819 (1970) [187, 1016 (1969)]

A New Case of Integrable Equations of Motion of a Rigid Body with One Fixed Point. (T) E. I. Kharlamova and P. V. Kharlamov. 14, 971 (1970) [188, 770 (1969)]

A Numerical Method for the Analysis of Plane Mechanisms. (T) S. A. Mashkov. 14, 973 (1970) [188, 1250 (1969)]

A New Solution of the Differential Equations of Motion of a Body with a Fixed Point under Kowalewska's Conditions. (T) E. I. Kharlamova and P. V. Kharlamov. 14, 1164 (1970) [189, 967 (1969)]

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Study of the Influence of Cobalt on the Solubility of Molybdenum in Iron-Nickel Martensite. (E) A. F. Edneral, O. P. Zhukov, and M. D. Perkas. 14, 152 (1969) [184, 828 (1969)]

Raising the Metastable Boundary by Vibration of Metal Melts. (E/T) D. L. Leichkis and N. V. Mikhailov. 14, 172 (1969) [184, 1321 (1969)]

Model of Physical Fatigue Limit of Metals and Alloys. (T) V. F. Terent'ev. 14, 273 (1969) [185, 324 (1969)]

On the Microinhomogeneity of Pig Iron. (E) A. M. Samarin and V. A. Izmailov. 14, 392 (1969) [185, 1276 (1969)]

Fine Structure of Ceriumated Cast Iron Graphite. (E) Yu. S. Akhmatov, K. P. Bunin, and Yu. N. Taran. 14, 482 (1969) [186, 83 (1969)]

Isothermal and Athermal Martensite Transformation in an Iron-Nickel-Molybdenum Alloy. (E) I. Ya. Georgieva and I. I. Nikitina. 14, 485 (1969) [186, 85 (1969)]

Effect of Electron Irradiation on the State of the Carbon in Martensite. (E) V. K. Kritskaya, V. A. Il'ina, and L. N. Bystrov. 14, 488 (1969) [186, 89 (1969)]

The Effect of Nonmetallic Inclusions on the Mechanism of Formation of Fatigue Cracks. (T) A. B. Kuslitskii, V. L. Mizetskii, and G. V. Karpenko. 14, 694 (1970) [187, 79 (1969)]

Hardening of Metals by Temporary Lowering of the Temperature during Creep. (E) G. V. Vladimirova, V. A. Likhachev, M. M. Myshlyaev, and S. S. Olevskii. 14, 1020 (1970) [188, 1034 (1969)]

The Search for Far Transuranium Elements in Ferromanganese Nodules. (E) O. Otgonsuren, V. P. Perelygin, and G. N. Flerov. 14, 1194 (1970) [189, 1200 (1969)]

METAL PHYSICS

Allotropic Transformation of Ytterbium in Films Condensed on a Cold Substrate. (E) B. G. Lazarev, V. M. Kuz'menko, A. I. Sudovtsov, and R. F. Bulatova. 14, 77 (1969) [184, 587 (1969)]

Formation of Long-Range Order in Nickel-Chromium Alloys. (E/T) E. Z. Vintaikin and G. G. Urushadze. 14, 84 (1969) [184, 589 (1969)]

The Electrical Resistance Minimum of Lutetium Films. (E) B. G. Lazerev, V. M. Kus'menko, and A. I. Sudovtsov. 14, 129 (1969) [184, 815 (1969)]

Study of the Influence of Cobalt on the Solubility of Molybdenum in Iron-Nickel Martensite. (E) A. F. Edneral, O. P. Zhukov, and M. D. Perkas. 14, 152 (1969) [184, 828 (1969)]

Texture of Acicular Crystals and Crystallographic Orientation of Dendrites in Molybdenum Ingots. (E/T) N. V. Ageev, D. V. Ignatov, and M. M. Kantor. 14, 158 (1969) [184, 1088 (1969)]

Calculation of the Time Necessary for the Formation of an Atmosphere of Impurity Atoms around a Boundary Dislocation. (T) G. M. Gutnikova and B. Ya. Lyubov. 14, 165 (1969) [184, 1095 (1969)]

X-Ray Kα Emission Band of Carbon in the Monocarbides of Transition Metals Belonging to the Fourth and Fifth Groups. (E) E. A. Zhurakovskii. 14, 168 (1969) [184, 1317 (1969)]

Raising the Metastable Boundary by Vibration of Metal Melts. (E/T) D. L. Leichkis and N. V. Mikhailov. 14, 172 (1969) [184, 1321 (1969)]

Mechanism of the Fatigue of Metals for Stresses above the Yield Point. (E) V. I. Shabalin. 14, 175 (1969) [184, 1324 (1969)]

Non-Stationary Radiation Diffusion in Metals. (T/E) L. N. Bystrov, L. I. Ivanov, and Yu. M. Platov. 14, 259 (1969) [185, 309 (1969)]

Model of Physical Fatigue Limit of Metals and Alloys. (T) V. F. Terent'ev. 14, 273 (1969) [185, 324 (1969)]

Predicting the Types of Reaction Involved in the Formation of Metallic Phases and Estimating Their Range of Homogeneity by Means of an Electronic Computer. (T) E. M. Savitskii, Yu. V. Devingtal', and V. B. Gribulya. 14, 279 (1969) [185, 561 (1969)]

On the Real Value of the Pressure of the Polymorphic Transformation in Iron. (E) L. F. Vereshchagin, A. A. Semerchan, N. N. Kuzin, and Yu. A. Sadkov. 14, 340 (1969) [185, 785 (1969)]

Effect of Deviations from Stoichiometric Composition on Diffusion-Controlled Processes in Interstitial Phases. (E) R. A. Andrievskii, I. I. Spivak, and A. E. Tsulin. 14, 360 (1969) [185, 792 (1969)]

The Martensite Phase with Face-Centered Cubic Lattice in Titanium Alloy Containing 5-9% Iron. (E) L. N. Guseva, L. A. Petrova, and I. A. Ogloblina. 14, 367 (1969) [185, 799 (1969)]

Ordering Processes in Neutron-Irradiated Martensite. (E) V. K. Kritskaya and V. A. Il'ina. 14, 389 (1969) [185, 1273 (1969)]

On the Microinhomogeneity of Pig Iron. (E) A. M. Samarin and V. A. Izmailov. 14, 392 (1969) [185, 1276 (1969)]

Factor of Chemical Indifference of Mutually Substituted Atoms in Crystals of Solid Solutions Formed by Intermetallic Compounds. (T) E. S. Makarov. 14, 406 (1969) [186, 313 (1969)]

Fine Structure of Ceriumated Cast Iron Graphite. (E) Yu. S. Akhmatov, K. P. Bunin, and Yu. N. Taran. 14, 482 (1969) [186, 83 (1969)]

Isothermal and Athermal Martensite Transformation in an Iron-Nickel-Molybdenum Alloy. (E) I. Ya. Georgieva and I. I. Nikitina. 14, 485 (1969) [186, 85 (1969)]

Effect of Electron Irradiation on the State of the Carbon in Martensite. (E) V. K. Kritskaya, V. A. Il'ina, and L. N. Bystrov. 14, 488 (1969) [186, 89 (1969)]

Effect of Reversible Friction on Dislocation and Vacancy Density in the Surface Layer of a Metal. (E) V. D. Evdokimov and G. E. Movsesov. 14, 491 (1969) [186, 302 (1969)]

On the Possibility of Impregnating Iron with Carbon by the Action of a Laser Light Pulse. (E) L. I. Mirkin. 14, 494 (1969) [186, 305 (1969)]

Change of the Electrical Resistance of Rb, Cs, and Ca under Pressure. (E) L. F. Vereshchagin, A. A. Semerchan, N. N. Kuzin, and Yu. A. Sadkov. 14, 557 (1969) [186, 1045 (1969)]

Field-Ion Microscopy of Defects in the Crystal Structure of Neutron-Irradiated Tungsten. (E) V. I. Kirienko and L. P. Potapov. 14, 607 (1969) [187, 1309 (1969)]

High-Temperature Creep of Silicon Single Crystals. (E) M. M. Myshlyaev and V. I. Nikitenko. 14, 685 (1970) [187, 549 (1969)]

The Effect of Nonmetallic Inclusions on the Mechanism of Formation of Fatigue Cracks. (T) A. B. Kuslitskii, V. L. Mizetskii, and G. V. Karpenko. 14, 694 (1970) [187, 79 (1969)]

Detection of Adsorptive Plasticizing of the Surface Layer of Metal under the Effect of an Active Lubricant in Boundary Lubrication. (E) A. A. Kanaev, V. N. L'vov, S. Ya. Veiler, and P. A. Rebinder. 14, 702 (1970) [187, 314 (1969)]

Self-Diffusion of Carbon. (E) E. S. Golovina, V. S. Chaplygina, and L. L. Kotova. 14, 705 (1970) [187, 558 (1969)]

X-Ray Emission of the $K\alpha$-Band of Nitrogen in the Group IV, V, and VI Transition Metal Nitrides. (E) E. A. Zhurakovskii and N. N. Vasilenko. 14, 710 (1970) [187, 562 (1969)]

The Magnetoresistance and the Hall Effect of Nickel–Copper Thin Films. (E) R. G. Annaev, G. Myalikgulyev, and L. S. Mel'nikova. 14, 758 (1970) [187, 765 (1969)]

Characteristics of Diffuse Scattering of X Rays at the Zone Stage of Aging of Alloy AlAg. (E/T) G. V. Kleshchev, A. V. Sheinkman, D. V. Shumilov, and A. E. Vanin. 14, 796 (1970) [187, 1261 (1969)]

Electrical Resistance of Surface Layers of Metals and the Mechanism of Seizure. (E) B. I. Kostetskii and O. V. Shul'ga. 14, 908 (1970) [188, 80 (1969)]

Durability and Creep in Monocrystals of Germanium and Silicon. (E) V. I. Betekhtin and A. N. Bakhtibaev. 14, 1007 (1970) [188, 799 (1969)]

On the Effect of Softening in Low-Temperature Creep of Lead in the Superconducting State. (E) I. A. Gindin, B. G. Lazarev, Ya. D. Starodubov, and V. P. Lebedev. 14, 1011 (1970) [188, 803 (1969)]

Hardening of Metals by Temporary Lowering of the Temperature during Creep. (E) G. V. Vladimirova, V. A. Likhachev, M. M. Myshlyaev, and S. S. Olevskii. 14, 1020 (1970) [188, 1034 (1969)]

Crystal Structure of $Nb_3(Al, Ge)$. (E) N. V. Ageev, N. E. Alekseevskii, and V. F. Shamrai. 14, 1023 (1970) [188, 1267 (1969)]

Effect of Surface Tension on Cavitation Erosion. (E) B. R. Lazarenko, K. K. Shal'nev, I. I. Varga, D. Shebesht'en, L. Balint, M. K. Bologa, and A. F. Derendovskii. 14, 1025 (1970) [188, 1269 (1969)]

X-Ray Study of the Structure of Liquid Lead. (E) A. V. Romanova and B. A. Mel'nik. 14, 1084 (1970) [189, 294 (1969)]

Effect of Impurities on the Surmounting of High Peierls Barriers by Dislocations. (E/T) V. N. Erofeev, V. I. Nikitenko, and V. B. Osvenskii. 14, 1108 (1970) [189, 513 (1969)]

Diffusion in the System Cu–Zn When Subjected to Alternating Deformations. (E) A. V. Kulemin and A. M. Mitskevich. 14, 1113 (1970) [189, 518 (1969)]

On the Influence of Alloying a Ni_3Mn Alloy with a Third 3d-Transition Element on Ordering Kinetics. (E) V. E. Panin, V. V. Prushinskii, V. P. Fadin, and L. I. Novak. 14, 1119 (1970) [189, 84 (1969)]

Effect of Neutron Irradiation on Grain Growth of Uranium during Subsequent Annealing. (E) V. D. Dmitriev and Sh. Sh. Ibragimov. 14, 1123 (1970) [189, 305 (1969)]

Vibration-Condensation Kinetics of Tungsten Powder. (E) I. A. Dobrushina, M. R. Spasskii, I. G. Shatalova, and E. D. Shchukin. 14, 1125 (1970) [189, 525 (1969)]

Plastic Deformation of Metals Caused by a 10^{-8} sec Laser Pulse. (E) L. I. Mirkin. 14, 1128 (1970) [189, 528 (1969)]

Reflection Spectra of Aluminum Nitride. (E/T) V. I. Donetskikh, A. A. Pletyushkin, Yu. V. Popov, N. G. Slavina, and V. V. Sobolev. 14, 1203 (1970) [189, 764 (1969)]

Kinetics of the Release of Energy Stored in Deformed Uranium. (E/T) Yu. N. Golovanov, A. F. Sitnikov, A. A. Tsvetaev, and R. K. Chuzhko. 14, 1208 (1970) [189, 993 (1969)]

Structure and Anomalous Physical Properties of Metallic Islands Condensed on Dielectric Substrates. (E) L. S. Palatnik, B. T. Boiko, A. N. Sinel'nikov, and V. R. Kopach. 14, 1211 (1970) [189, 996 (1969)]

Nucleation of the Crystalline Phase in Supercooled Melts. (E) D. L. Leichkis and N. V. Mikhailov. 14, 1226 (1970) [189, 1222 (1969)]

Composite Superconductors Obtained from Alloys by the Phase Substitution Method. (E) E. M. Savitskii, B. P. Mikhailov, and V. V. Baron. 14, 1229 (1970) [189, 1226 (1969)]

METHODS AND INSTRUMENTATION

Automatic Cathode-Ray Tube Scanner. (E) V. F. Borisovskii, N. D. Dikusar, V. V. Ermolaev, A. D. Zlobin, I. N. Kukhtina, I. I. Skryl', A. I. Filippov, V. N. Shigaev, and V. N. Shkundenkov. 14, 256 (1969) [185, 306 (1969)]

Explosion MHD Generator with Superconducting Magnet System. (E) V. A. Kirillin, V. A. Al'tov, E. I. Asinovskii, A. N. Dremin, F. I. Dubovitskii, V. B. Zenkevich, Yu. A. Kuznetsov, E. F. Lebdev, S. D. Savrov, V. V. Sychev, and A. E. Sheindlin. 14, 266 (1969) [185, 316 (1969)]

The Problem of Measuring the Quantity of a Medium in a Closed Volume. (E) B. N. Petrov, V. A. Viktorov, and B. V. Lunkin. 14, 479 (1969) [186, 564 (1969)]

Measuring the Volume of Fluids in a Hydrostatic High-Pressure Cell with an Internal Heater. (E) I. N. Makarenko, V. A. Ivanov, and S. M. Stishov. 14, 924 (1970) [188, 564 (1969)]

MOLECULAR STRUCTURE AND SPECTRA

Mass Spectrometer with Electrostatic and Magnetic Prisms. (E) V. M. Kel'man, I. V. Rodnikova, and M. L. Uteev. 14, 155 (1969) [184, 831 (1969)]

An Approximate Method of Determining the Optical Characteristics of Dye Molecules. (T) V. E. Romanov, B. M. Yavorskii, and R. S. Kozma. 14, 772 (1970) [187, 784 (1969)]

NUCLEAR PHYSICS

Configuration Representation of Nucleon Interactions in the Superfluid Nuclear Model. (T) V. Rybarska. 14, 218 (1969) [185, 73 (1969)]

Delayed Nuclear Fission. (T) É. E. Berlovich and Yu. P. Novikov. 14, 349 (1969) [185, 1025 (1969)]

Quadrupole and Octupole One-Phonon States of Nuclei in the Range $174 \le A \le 188$. (T) L. A. Malov, V. G. Solov'ev, and U. M. Fainer. 14, 461 (1969) [186, 299 (1969)]

Energy and Intensity in the Multiple Backscattering of Beta Particles from Nuclei of Various Elements. (E) L. M. Boyarshinov. 14, 464 (1969) [186, 545 (1969)]

Possible Mode of Acceleration and Beam Extraction in an Isochronous Cyclotron. (T) Yu. G. Basargin and R. N. Litunovskii. 14, 585 (1969) [186, 1288 (1969)]

Probability of Double Beta Decay of Nuclei in Regions Far Removed from the Beta-Stable Band. (T) É. E. Berlovich and Yu. N. Novikov. 14, 986 (1970) [188, 1023 (1969)]

Octupole States of Even-Even Nuclides in the Range $150 \le A \le 176$. (T/E) L. A. Malov, V. G. Solov'ev, and S. I. Fedorov. 14, 1186 (1970) [189, 987 (1969)]

OPTICAL PROPERTIES AND TECHNIQUES

Diffraction by a Bounded Object. (T) A. G. Sveshnikov. 14, 26 (1969) [184, 63 (1969)]

An Inverse Problem in the Theory of Diffraction. (T) G. M. Malyuzhinets. 14, 118 (1969) [184, 1301 (1969)]

Principal Spectral Parameters of the Raman Lines of Tetramethyl Silane and Methyl Chlorosilanes. (E) I. V. Shevchenko, I. F. Kovalev, M. G. Voronkov, and E. Ya. Lukevits. 14, 137 (1969) [184, 824 (1969)]

Quasioptical Potential in Certain Simple Models of Quantum Field Theory. (T) V. D. Kukin. 14, 141 (1969) [184, 1080 (1969)]

Negative Dispersion of Light in $CaWO_4 : Nd^{3+}$ Crystals. (E) N. K. Bel'skii and D. A. Mukhamedova. 14, 240 (1969) [185, 545 (1969)]

Double-Beam Reflection in Crystals and Its Use in Electrooptical Modulators. (T/E) Yu. É. Kamach, E. N. Kozlovskii, V. M. Ovchinnikov, and V. A. Shamburov. 14, 301 (1969) [185, 1285 (1969)]

Synthesis and Optical Properties of Crystals of $YAlO_3$ Activated by Nd^{3+} Ions. (E) Kh. S. Bagdasarov, A. A. Kaminskii, and G. I. Rogov. 14, 346 (1969) [185, 1022 (1969)]

Variational Analysis of Isotropic EPR Spectra in Fourier Space. (T) S. N. Dobryakov and Ya. S. Lebedev. 14, 351 (1969) [185, 1028 (1969)]

Electron Paramagnetic Resonance of the Mn^{2+} and Gd^{3+} Ions in Chalcogenide Glasses $TlAsSe_2$ and $TlAsS_2$ in the 2 and 0.8 cm Ranges. (E) I. V. Chepeleva. 14, 356 (1969) [185, 1266 (1969)]

Diffraction Theory of Knife-Edge and Slit Shadow Photometry. (T) L. A. Vasil'ev, É. P. Kazandzhan, and V. S. Sukhorukikh. 14, 441 (1969) [186, 70 (1969)]

Two-Photon Excitation in Uranyl Crystals by a Ruby Laser. (E) G. N. Lyalin and L. E. Solov'ev. 14, 444 (1969) [186, 73 (1969)]

Theory of a Regenerative Optron. (T) E'. I. Adirovich, A. G. Vishnevetskii, P. I. Knigin, O. A. Tikhomirova, and E'. V. Tsibulin. 14, 538 (1969) [186, 799 (1969)]

The Condition for Complete Regeneration in an Optron with a Photoresistor. (E) É. I. Adirovich, P. I. Knigin, O. A. Tikhomirova, and É. V. Tsibulin. 14, 550 (1969) [186, 1037 (1969)]

Dynamical Theory of the Regenerative Optron. (T) É. I. Adirovich, A. G. Vishnevetskii, and P. M. Karageorgii-Alkalaev. 14, 578 (1969) [186, 1281 (1969)]

Production of Alkali-Halide Phosphors by Surface Treatment. (E) A. B. Gol'denberg, S. I. Golub, and E. A. Nesterovskaya. 14, 670 (1970) [187, 305 (1969)]

Holographic Method of Converting Coherent Light Fields. (E/T) M. D. Bondarenko, A. V. Gnatovskii, and M. S. Soskii. 14, 675 (1970) [187, 538 (1969)]

Induced Transitions of a Relativistic Electron in a Uniform Constant Magnetic Field. (T) M. M. Denisov. 14, 682 (1970) [187, 545 (1969)]

Asymptotic Expansions in the Theory of Diffraction of a Plane Wave by a Strip. (T) P. Ya. Ufimtsev. 14, 755 (1970) [187, 1257 (1969)]

Investigation of Optical Breakdown in Air, Induced by Ultrashort Pulses, Using Moving Image Photography and an Image Converter. (E) B. Z. Gorbenko, Yu. A. Drozhbin, S. D. Kaitmazov, A. A. Medvedev, A. M. Prokhorov, and A. M. Tolmachov. 14, 764 (1970) [187, 772 (1969)]

An Approximate Method of Determining the Optical Characteristics of Dye Molecules. (T) V. E. Romanov, B. M. Yavorskii, and R. S. Kozma. 14, 772 (1970) [187, 784 (1969)]

A Possible Origin of the Electron Paramagnetic Resonance Spectrum of Nitrogen Ions in Diamond. (E) V. N. Lazukin and A. N. Terent'evskii. 14, 793 (1970) [187, 1032 (1969)]

Limits of Applicability of the Buger Law in Water Mists (Clouds) in Relation to the Angular Aperture of the Receiver and the Parameters of the Laser Beam. (E) M. A. Kolosov, A. V. Sokolov, L. V. Fedorova, and R. A. Shirei. 14, 800 (1970) [187, 1264 (1969)]

Dependence of the Degree of Polarization of Induced Emission in Dyes on the Angle Between the Direction of Polarization of the Exciting Light and the Axis of the Resonator. (E/T) A. N. Sevchenko, A. A. Kovalev, and V. A. Pilipovich. 14, 811 (1970) [187, 1039 (1969)]

Increase in the Symmetry of the Luminescence Centers in Europium Benzoylacetonate in Response to Hydrostatic Pressure. (E) V. A. Voloshin, A. A. Galkin, and L. K. Mashkov. 14, 857 (1970) [188, 64 (1969)]

Determining the Parameters of a Dense Plasma from the Shift and Half-Width of Satellites in the Spectrum of Scattered Light. (T) L. N. Pyatnitskii, G. P. Khaustovich, and Vl. V. Korobkin. 14, 867 (1970) [188, 73 (1969)]

Light-Emitting Diodes with Radiation Hysteresis. (E/T) E. I. Adirovich, A. I. Luk'yanova, Sh. A. Mirsagatov, V. V. Morozkin, and V. M. Rubinov. 14, 874 (1970) [188, 304 (1969)]

Special Properties of the Fluorescence of the Vapors of Anthracene Derivatives. (E) N. A. Borisevich and G. B. Tolstorozhev. 14, 878 (1970) [188, 308 (1969)]

Interpretation of the Absorption Spectrum of a Cesium Uranyl Chloride Crystal. (E) A. I. Komyak and A. N. Sevchenko. 14, 887 (1970) [188, 318 (1969)]

Optical and Generation Properties of Mixed CdF_2-YF_3 Crystals Activated with Nd^{3+} Ions. (E) Kh. S. Bagdasarov, O. E. Izotova, A. A. Kaminskii, L. Li, and B. P. Sobolev. 14, 939 (1970) [188, 1042 (1969)]

Self-Focusing High-Intensity Light Beams. (T) A. L. Dyshko, V. N. Lugovoi, and A. M. Prokhorov. 14, 976 (1970) [188, 792 (1969)]

Nature of Capture Centers in Quartz Glasses. (E) A. V. Amosov, G. T. Petrovskii, and D. M. Yudin. 14, 983 (1970) [188, 1020 (1969)]

Experimental Observation of $^{13}C^{4+}$, $^{29}Si^{4+}$, $^{77}Se^{4+}$, and S^{4+} Ions in a Diamond Lattice Using Electron Paramagnetic Resonance. (E) V. N. Lazukin and A. N. Terent'evskii. 14, 989 (1970) [188, 1026 (1969)]

Absorption of Light in a $CaWO_4:Nd^{3+}$ Crystal with Na^+ Compensation in the 1.06-μ Range. (E) D. A. Mukhamedova. 14, 991 (1970) [188, 1028 (1969)]

Polarization of the Induced Radiation of Phthalimide Solutions. (E) A. N. Sevchenko, L. G. Pikulik, L. F. Gladchenko, and A. D. Das'ko. 14, 1003 (1970) [188, 1263 (1969)]

Interband Transitions in Disordered Systems with a Slowly Varying Random Field. (T) V. L. Bonch-Bruevich. 14, 1101 (1970) [189, 505 (1969)]

On the Decrease in the Luminescence Decay Time of Europium Benzoylacetonate under the Influence of Hydrostatic Pressure. (E) V. A. Voloshin, A. A. Galkin, and A. I. Savutskii. 14, 1106 (1970) [189, 511 (1969)]

Absorption Spectra of Diamonds of Intermediate Type. (E) Yu. A. Klyuev, A. N. Rykov, Yu. A. Dudenkov, and V. M. Zubkov. 14, 1133 (1970) [189, 771 (1969)]

Recombination Emission in Semiconductors Associated with the Pinch Effect for Highly Degenerate Electron and Hole Gases. (T) V. V. Vladimirov. 14, 1176 (1970) [189, 976 (1969)]

Destruction of Color Centers of NaCl Single Crystals by Shock Compression. (E) O. B. Yakusheva, V. V. Yakushev, and A. N. Dremin. 14, 1189 (1970) [189, 991 (1969)]

Calculation of Ground Energy Level of Helium by Means of Trajectory Integrals. (T) A. M. Evseev. 14, 1191 (1970) [189, 1197 (1969)]

Reflection Spectra of Aluminum Nitride. (E/T) V. I. Donetskikh, A. A. Pletyushkin, Yu. V. Popov, N. G. Slavina, and V. V. Sobolev. 14, 1203 (1970) [189, 764 (1969)]

PHOTOCHEMICAL EFFECTS

Effect of a Pulsed Electric Field on the Formation of the Latent Photographic Image. (E) D. M. Samoilovich and I. V. Ardashev. 14, 58 (1969) [184, 327 (1969)]

High-Pressure Chemical Lasers and Chemical Reactions Stimulated by Light. (T) S. I. Pekar. 14, 691 (1970) [187, 555 (1969)]

PHOTOELECTRIC PHENOMENA

Interference Phenomena in Photoionization of Molecules. (T) I. G. Kaplan and A. P. Markin. 14, 36 (1969) [184, 66 (1969)]

Effect of a Pulsed Electric Field on the Formation of the Latent Photographic Image. (E) D. M. Samoilovich and I. V. Ardashev. 14, 58 (1969) [184, 327 (1969)]

The Photocapillary Effect for Germanium. (E) A. I. Bykhovskii, A. Yu. Proleskovskaya, N. N. Novikov, and N. Ya. Gorid'ko. 14, 79 (1969) [184, 85 (1969)]

Theory of a Regenerative Optron. (T) E'. I. Adirovich, A. G. Vishnevetskii, P. I. Knigin, O. A. Tikhomirova, and E'. V. Tsibulin. 14, 538 (1969) [186, 799 (1969)]

The Condition for Complete Regeneration in an Optron with a Photoresistor. (E) É. I. Adirovich, P. I. Knigin, O. A. Tikhomirova, and É. V. Tsibulin. 14, 550 (1969) [186, 1037 (1969)]

Photomagnetic Effect in Cadmium Telluride Films Giving Anomalously High Photovoltages. (E) É. I. Adirovich, É. M. Mastov, and Yu. M. Yuabov. 14, 994 (1970) [188, 1254 (1969)]

PLASMAS

A One-Dimensional Nonlinear Instability Model for an Anisotropic Plasma. (T) Yu. A. Berezin and R. Z. Sagdeev. 14, 62 (1969) [184, 570 (1969)]

Calculating the Ionization Instability in Low-Temperature Magnetized Plasma. (T) E. P. Velikhov, L. M. Degtyarev, A. A. Samarskii, and A. P. Favorskii. 14, 68 (1969) [184, 578 (1969)]

Transport of Heat in a Plasma along a Magnetic Field (Replacement Waves). (E/T) A. A. Ivanov, L. L. Kozorovitskii, and V. L. Rusanov. 14, 126 (1969) [184, 611 (1969)]

Diamagnetic Plasmoid in the Field of a Magnetic Dipole. (T) Vo Khong An' and B. A. Tverskoi. 14, 224 (1969) [185, 289 (1969)]

"Calorimetric" Measurement of the Electron Temperature of a Plasma in a Collisionless Shock Wave. (E/T) G. E. Smolkin, E. A. Striganova, and G. V. Sholin. 14, 343 (1969) [185, 788 (1969)]
Dissipative, Trapped-Particle Instability in a Dense Plasma. (T) B. B. Kadomtsev and O. P. Pogutse. 14, 470 (1969) [186, 553 (1969)]
Excitation of Nonpotential Oscillations in a Solid-State Plasma. (T) A. A. Ivanov, E. Z. Meilikhov, V. V. Parail, and D. A. Frank-Kamenetskii. 14, 652 (1970) [187, 68 (1969)]
Recombination Radiation Associated with the Pinch Effect in a Nondegenerate Semiconductor Electron-Hole Plasma. (T) I. I. Boiko and V. V. Vladimirov. 14, 854 (1970) [188, 60 (1969)]
Nonlinear Excitation of Drift Waves in a Nonhomogeneous Plasma. (T) B. B. Kadomtsev and O. P. Pogutse. 14, 863 (1970) [188, 69 (1969)]
Determining the Parameters of a Dense Plasma from the Shift and Half-Width of Satellites in the Spectrum of Scattered Light. (T) L. N. Pyatnitskii, G. P. Khaustovich, and Vl. V. Korobkin. 14, 867 (1970) [188, 73 (1969)]
Electronic Structure of Cyclic Molecules. (T) L. V. Iogansen. 14, 1071 (1970) [189, 281 (1969)]
Observation of Plasma Noise during Turbulent Heating. (E) Yu. G. Kalinin, D. N. Lin, L. I. Rudakov, V. D. Ryutov, and V. A. Skoryupin. 14, 1074 (1970) [189, 284 (1969)]
Observation of Ionic Sound in a Toroidally-Shaped Plasma during Turbulent Heating. (E) N. F. Perepelkin and S. D. Fanchenko. 14, 1078 (1970) [189, 288 (1969)]
Concerning the Problem of the Kinetic Description of Fast Processes in a Plasma. (T) R. V. Polovin and V. V. Rozhkov. 14, 1082 (1970) [189, 292 (1969)]
Paradox in the Diffusion of Plasma in Toroidal Magnetic Traps. (T) R. Z. Sagdeev and A. A. Galeev. 14, 1198 (1970) [189, 1204 (1969)]

POLYMERS
Polymorphous Transformation in Organic Crystals. (E/T) M. A. Tseneva. 14, 236 (1969) [185, 302 (1969)]
Relaxation Processes in Linear Polymers. (T) N. V. Rapp. 14, 696 (1970) [187, 81 (1969)]
Oriented Crystallization on High-Polymer Boundary Layers, Copying the Electric Relief of the Crystalline-Substrate Surface by Virtue of the Electret Mechanism. (E) G. I. Distler and S. A. Kobzareva. 14, 935 (1970) [188, 811 (1969)]
Temperature-Time Relationship of the Stimulated-Elasticity Limit of Polymers. (E/T) S. B. Ratner and Yu. I. Brokhin. 14, 1014 (1970) [188, 807 (1969)]
Anomalous Decrease in Friction When Polyethylene is Bombarded in Vacuo with Certain Atoms and Molecules. (E) E. A. Dukhovskii, V. S. Onishchenko, A. N. Ponomarev, A. A. Silin, and V. L. Tal'roze. 14, 1218 (1970) [189, 1211 (1969)]

POWDERS
Secondary Maxima in the Scattering of X Rays by Finely Divided Polycrystals. (E/T) I. V. Smushkov and V. F. Tkachenko. 14, 250 (1969) [185, 79 (1969)]
The Problem of the Gravitational Stability of a Dust Cloud. (T) L. G. Khazin and É. É. Shonol'. 14, 322 (1969) [185, 1018 (1969)]
Spontaneous Unipolar Charging of Beta-Active "Hot" Aerosol Particles. (T) V. D. Ivanov and V. N. Kirichenko. 14, 859 (1970) [188, 65 (1969)]
Kinetics of Unipolar Charging of Beta-Active "Hot" Particles in an Electric Field. (E) V. N. Kirichenko and V. D. Ivanov. 14, 884 (1970) [188, 315 (1969)]
Vibration-Condensation Kinetics of Tungsten Powder. (E) I. A. Dobrushina, M. R. Spasskii, I. G. Shatalova, and E. D. Shchukin. 14, 1125 (1970) [189, 525 (1969)]
An Energy Parameter for Vibrocompaction of Powders. (T/E) M. R. Spasskii, I. A. Dobrushina, I. G. Shatalova, E. D. Shchukin, and P. A. Rebinder. 14, 1205 (1970) [189, 767 (1969)]

QUANTUM MECHANICS
Measurement of the Quantum Conversion Efficiency in Neodymium Glass. (E) E. M. Dianov, B. V. Ershov, Yu. P. Pimenov, and V. B. Fedorov. 14, 53 (1969) [184, 321 (1969)]
Quasioptical Potential in Certain Simple Models of Quantum Field Theory. (T) V. D. Kukin. 14, 141 (1969) [184, 1080 (1969)]
The Discrete and Continuous Spectra of the Radial Dirac Equation. (T) L. A. Sakhnovich. 14, 199 (1969) [185, 61 (1969)]
The Asymptotic Behavior of the Wave Function for a Quasistationary State. (T) A. A. Arsen'ev. 14, 845 (1970) [188, 545 (1969)]
The Impossibility of Crystal Ordering in One-Dimensional Quantum Systems. (T) B. I. Sadovnikov and E. M. Sorokina. 14, 968 (1970) [188, 788 (1969)]
On the Quantum-Statistical Theory of Spin Diffusion. (T) L. L. Buishvili and N. P. Giorgadze. 14, 1104 (1970) [189, 508 (1969)]

RADIATION
Diamagnetic Plasmoid in the Field of a Magnetic Dipole. (T) Vo Khong An' and B. A. Tverskoi. 14, 224 (1969) [185, 289 (1969)]
Nonstationary Radiation Diffusion in Metals. (T/E) L. N. Bystrov, L. I. Ivanov, and Yu. M. Platov. 14, 259 (1969) [185, 309 (1969)]
Generation of Stimulated Radiation in a Dispersive Cavity. (T) B. L. Livshits and V. N. Tsikunov. 14, 473 (1969) [186, 557 (1969)]
Some Nonlinear Problems in the Theory of Antenna Synthesis. (T) A. G. Ramm. 14, 532 (1969) [186, 1277 (1969)]
Radiation Emission of an Electron-Positron Pair. (T) V. E. Pafomov. 14, 688 (1970) [187, 552 (1969)]
Method of Eigenfunctions for Incorrectly Posed Synthesis Problem of a Linear Emitter. (T) L. D. Bakhrakh and S. D. Kremenetskii. 14, 749 (1970) [187, 758 (1969)]
New Pulsar PP 0943 and the Major Characteristics of Its Radio Emission. (E) Yu. I. Alekseev, V. V. Vitkevich, V. F. Zhuravlev, and Yu. P. Shitov. 14, 781 (1970) [187, 1019 (1969)]
Vibrational Relaxation of Oscillators with Near Frequencies. (T) E. I. Dashevskaya. 14, 787 (1970) [187, 1025 (1969)]
Isotope Effect in the Fluorescence Spectra of the Ammonium Salts of Uranyl. (E) G. G. Novitskii, A. N. Sevchenko, and D. S. Umreiko. 14, 803 (1970) [187, 1268 (1969)]
The Method of Successive Approximations for Incorrectly Formulated Problems in the Theory of the Synthesis of Antenna Systems. (T) L. D. Bakhrakh, and S. D. Kremenetskii. 14, 808 (1970) [187, 1035 (1969)]
Recombination Radiation Associated with the Pinch Effect in a Nondegenerate Semiconductor Electron-Hole Plasma. (T) I. I. Boiko and V. V. Vladimirov. 14, 854 (1970) [188, 60 (1969)]
Light-Emitting Diodes with Radiation Hysteresis. (E/T) É. I. Adirovich, A. I. Luk'yanova, Sh. A. Mirsagatov, V. V. Morozkin, and V. M. Rubinov. 14, 874 (1970) [188, 304 (1969)]

RELATIVITY AND GRAVITATION
Motion of a Medium with Ultrarelativistic Velocities in the General Theory of Relativity. (T) K. P. Stanyukovich. 14, 353 (1969) [185, 1030 (1969)]
Integral Conservation Laws for Continuous Media in the General Theory of Relativity. (T) V. A. Zhelnorovich. 14, 432 (1969) [186, 50 (1969)]
Observable Effects in Relativistic Tensor Gravitation Theories in Flat Space. (T) O. N. Naida. 14, 475 (1969) [186, 560 (1969)]
Modelling the Paths of Test Bodies in a Gravitational Field. (T) A. Z. Petrov. 14, 597 (1969) [186, 1302 (1969)]
The Schwarzschild Metric in a Synchronous Frame of Reference. (T) K. P. Stanyukovich. 14, 657 (1970) [187, 75 (1969)]
Bloch Functions of a Relativistic Charged Particle in a Magnetic Field. (T) I. A. Malkin and V. I. Man'ko. 14, 891 (1970) [188, 322 (1969)]
The Gibbs Ensemble and Chains of Equations for the Correlation Functions of Weakly Relativistic Systems. (T) I. P. Pavlotskii. 14, 965 (1970) [188, 784 (1969)]

SCATTERING

Scattering of Ions by Crystals as a Function of Initial Ion Energy. (E) V. A. Molchanov, V. A. Snisar', and V. M. Chicherov. 14, 43 (1969) [184, 74 (1969)]

Secondary Maxima in the Scattering of X Rays by Finely Divided Polycrystals. (E/T) I. V. Smushkov and V. F. Tkachenko. 14, 250 (1969) [185, 79 (1969)]

Small-Angle X Ray Scattering from Neutron-Irradiated Lithium Fluoride. (E) I. V. Telegina and E. V. Kolontsova. 14, 714 (1970) [187, 566 (1969)]

Characteristics of Diffuse Scattering of X Rays at the Zone Stage of Aging of Alloy AlAg. (E/T) G. V. Kleshchev, A. V. Sheinkman, D. V. Shumilov, and A. E. Vanin. 14, 796 (1970) [187, 1261 (1969)]

Kinetics of the Release of Energy Stored in Deformed Uranium. (E/T) Yu. N. Golovanov, A. F. Sitnikov, A. A. Tsvetaev, and R. K. Chuzhko. 14, 1208 (1970) [189, 993 (1969)]

Anomalous Decrease in Friction When Polyethylene is Bombarded in Vacuo with Certain Atoms and Molecules. (E) E. A. Dukhovskii, V. S. Onishchenko, A. N. Ponomarev, A. A. Silin, and V. L. Tal'roze. 14, 1218 (1970) [189, 1211 (1969)]

SEMICONDUCTORS

Properties of Cadmium Telluride p-n Junctions. (E) P. S. Kireev, L. I. Kalugina, and A. V. Vanyukov. 14, 56 (1969) [184, 324 (1969)]

The Existence of a Diamond-like Semiconductor in a Glassy State. (E) N. A. Goryunova, L. B. Zlatkin, Yu. F. Markov, and A. I. Stekhanov. 14, 72 (1969) [184, 582 (1969)]

The Photocapillary Effect for Germanium. (E) A. I. Bykhovskii, A. Yu. Proleskovskaya, N. N. Novikov, and N. Ya. Gorid'ko. 14, 79 (1969) [184, 85 (1969)]

Effect of Doping Impurities on the Anisotropy of Plastic Deformation in GaAs Single Crystals. (E) V. B. Osvenskii, L. P. Kholodnyi, and M. G. Mil'vidskii. 14, 144 (1969) [184, 1084 (1969)]

Rayleigh Waves in Gallium Arsenide Semiconductor Piezoelectric Crystals. (T) I. A. Biktorov. 14, 660 (1970) [187, 294 (1969)]

Charge Accumulation in Epitaxial p-n Structures of Gallium Arsenide. (E) N. S. Dubrovskaya, B. A. Krasyuk, S. S. Meskin, N. F. Nedel'skii, V. N. Ravich, and V. I. Sobolev. 14, 664 (1970) [187, 298 (1969)]

High-Temperature Creep of Silicon Single Crystals. (E) M. M. Myshlyaev and V. I. Nikitenko. 14, 685 (1970) [187, 549 (1969)]

Recombination Radiation Associated with the Pinch Effect in a Nondegenerate Semiconductor Electron-Hole Plasma. (T) I. I. Boiko and V. V. Vladimirov. 14, 854 (1970) [188, 60 (1969)]

Anomalous Plasticity of the Surface Layers of Semiconducting Crystals. (T) V. P. Alekhin, O. V. Gusev, V. I. Trefilov, and M. Kh. Shorshorov. 14, 894 (1970) [188, 548 (1969)]

Low-Temperature Plastic Deformation of the Surface of Silicon Single Crystals. (E/T) V. P. Alekhin, O. V. Gusev, Yu. N. Petrov, V. I. Trefilov, and M. Kh. Shorshorov. 14, 917 (1970) [188, 326 (1969)]

Photomagnetic Effect in Cadmium Telluride Films Giving Anomalously High Photovoltages. (E) É. I. Adirovich, É. M. Mastov, and Yu. M. Yuabov. 14, 994 (1970) [188, 1254 (1969)]

Durability and Creep in Monocrystals of Germanium and Silicon. (E) V. I. Betekhtin and A. N. Bakhtibaev. 14, 1007 (1970) [188, 799 (1969)]

On a New Area of Application of Certain Semiconductor Compounds. (E) Yu. V. Rud' and K. V. Sanin. 14, 1087 (1970) [189, 297 (1969)]

Recombination Emission in Semiconductors Associated with the Pinch Effect for Highly Degenerate Electron and Hole Gases. (T) V. V. Vladimirov. 14, 1176 (1970) [189, 976 (1969)]

Nucleation of the Crystalline Phase in Supercooled Melts. (E) D. L. Leichkis and N. V. Mikhailov. 14, 1226 (1970) [189, 1222 (1969)]

STATISTICAL MECHANICS AND THERMODYNAMICS

Entropy in Nonequilibrium Statistical Mechanics. (T) Yu. E. Murakhver. 14, 46 (1969) [184, 78 (1969)]

Construction of Approximate Shock Adiabats of Solids in the Hydrodynamic Region. (T/E) S. V. Bobrovskii, V. M. Gogolev, and B. V. Zamyshlyaev. 14, 65 (1969) [184, 574 (1969)]

Some Problems of Statistical Physics in Strongly Extended Bodies. (T) Yu. S. Tyupkin and A. S. Shvarts. 14, 233 (1969) [185, 299 (1969)]

A Nonequilibrium Statistical Operator in the Kinetics of Irreversible Processes with Small Energy Transfer. (T) V. P. Kalashnikov. 14, 542 (1969) [186, 803 (1969)]

Thermodynamics of Partially Ionized Hydrogen. (T) E. V. Samuilov. 14, 571 (1969) [186, 1059 (1969)]

Thermodynamics of the Distribution of Cation Vacancies between the Sublattices in Spinel-Ferrite Solid Solutions. (E/T) B. Ya. Sukharevskii, B. G. Alapin, and I. I. Vishnevskii. 14, 942 (1970) [188, 1045 (1969)]

The Kinetics of Fluctuations and Determination of the Kinetic Coefficients. (T) O. M. Todes. 14, 1116 (1970) [189, 521 (1969)]

STRENGTH OF MATERIALS

Elastic-Plastic Stress Distribution in a Plane with an Aperture. (T) B. D. Annin. 14, 88 (1969) [184, 315 (1969)]

Effect of Doping Impurities on the Anisotropy of Plastic Deformation in GaAs Single Crystals. (E) V. B. Osvenskii, L. P. Kholodnyi, and M. G. Mil'vidskii. 14, 144 (1969) [184, 1084 (1969)]

Determination of the "Plasticity" Limit of Inorganic Glasses by the Microindentation Method. (T/E) G. M. Bartenev and D. S. Sanditov. 14, 161 (1969) [184, 1091 (1969)]

Mechanism of the Fatigue of Metals for Stresses above the Yield Point. (E) V. I. Shabalin. 14, 175 (1969) [184, 1324 (1969)]

Variable Plasticity and Accumulation of Damage. (T/E) V. V. Moskvitin. 15, 178 (1969) [184, 796 (1969)]

A Variational Principle in the Mechanics of Rupture. (T) E. M. Morozov. 14, 181 (1969) [184, 1308 (1969)]

Concerning the Nature of the Physical Yield Point and Brittle Fracture. (E) V. F. Terent'ev. 14, 253 (1969) [185, 83 (1969)]

Model of Physical Fatigue Limit of Metals and Alloys. (T) V. F. Terent'ev. 14, 273 (1969) [185, 324 (1969)]

Dynamic Problem for a Plane with a Cut. (T) V. Z. Parton and B. A. Kudryavtsev. 14, 282 (1969) [185, 541 (1969)]

Rupture Strength Criteria for Brittle Bodies under Conditions of Torsion, Tension and Torsion, and Compression. (T/E) A. I. Markov, N. V. Mikhailov, and P. A. Rebinder. 14, 374 (1969) [185, 805 (1969)]

Kinetics of Spreading Apart of a Dislocation Polygon Wall. (T) V. A. Solob'ev. 14, 382 (1969) [185, 1037 (1969)]

Manifestation of the Adsorption-Induced Loss of Strength Associated with Reversing Sliding Friction. (E) V. D. Evdokimov. 14, 386 (1969) [185, 1270 (1969)]

High-Temperature Creep of Silicon Single Crystals. (E) M. M. Myshlyaev and V. I. Nikitenko. 14, 685 (1970) [187, 549 (1969)]

The Effect of Nonmetallic Inclusions on the Mechanism of Formation of Fatigue Cracks. (T) A. B. Kuslitskii, V. L. Mizetskii, and G. V. Karpenko. 14, 694 (1970) [187, 79 (1969)]

Relaxation Processes in Linear Polymers. (T) N. V. Rapp. 14, 696 (1970) [187, 81 (1969)]

An Energy Condition for the Growth of Cracks in Elastoplastic Bodies. (T) E. M. Morozov. 14, 717 (1970) [187, 57 (1969)]

Conditions at the End of a Crack. (T/E) L. A. Galin, Ya. B. Fridman, G. P. Cherepanov, E. M. Morozov, and V. Z. Parton. 14, 816 (1970) [187, 754 (1969)]

Equivalent Stiffness of a Doubly Periodic Grating Reinforced with Elastic Rings. (T) É. I. Grigolyuk and L. A. Fil'shtinskii. 14, 822 (1970) [187, 1254 (1969)]

The Kinetics of Disintegration under Shock Heating. (E/T) V. M. Finkel', V. N. Gurarii, and N. I. Alyushina. 14, 927 (1970) [188, 567 (1969)]

Durability and Creep in Monocrystals of Germanium and Silicon. (E) V. I. Betekhtin and A. N. Bakhtibaev. 14, 1007 (1970) [188, 799 (1969)]

On the Effect of Softening in Low-Temperature Creep of Lead in the Superconducting State. (E) I. A. Gindin, B. G. Lazarev, Ya. D. Starodubov, and V. P. Lebedev. 14, 1011 (1970) [188, 803 (1969)]

Hardening of Metals by Temporary Lowering of the Temperature during Creep. (E) G. V. Vladimirova, V. A. Likhachev, M. M. Myshlyaev, and S. S. Olevskii. 14, 1020 (1970) [188, 1034 (1969)]

Effect of Surface Tension on Cavitation Erosion. (E) B. R. Lazarenko, K. K. Shal'nev, I. I. Varga, D. Shebesht'en, L. Balint, M. K. Bologa, and A. F. Derendovskii. 14, 1025 (1970) [188, 1269 (1969)]

Diffusion in the System Cu - Zn When Subjected to Alternating Deformations. (E) A. V. Kulemin and A. M. Mitskevich. 14, 1113 (1970) [189, 518 (1969)]

On the Influence of Alloying a Ni_3Mn Alloy with a Third 3d-Transition Element on Ordering Kinetics. (E) V. E. Panin, V. V. Prushinskii, V. P. Fadin, and L. I. Novak. 14, 1119 (1970) [189, 84 (1969)]

Strength Characteristics of Elastomers at Small Deformations. (E) Yu. S. Zuev and G. G. Bobylev. 14, 1221 (1970) [189, 1215 (1969)]

SUPERCONDUCTIVITY

A 112-kOe Superconducting Laboratory Solenoid of Deformable Alloy Wire. (E) B. G. Lazarev, L. S. Lazareva, V. R. Golik, and S. I. Goridov. 14, 82 (1969) [184, 89 (1969)]

Configuration Representation of Nucleon Interactions in the Superfluid Nuclear Model. (T) V. Rybarska. 14, 218 (1969) [185, 73 (1969)]

Microscopic Theory of a Steady Josephson Current. (T) S. V. Svidzinskii and V. A. Slyusarev. 14, 230 (1969) [185, 296 (1969)]

Explosion MHD Generator with Superconducting Magnet System. (E) V. A. Kirillin, V. A. Al'tov, E. I. Asinovskii, A. N. Dremin, F. I. Dubovitskii, V. B. Zenkevich, Yu. A. Kuznetsov, E. F. Lebdev, S. D. Savrov, V. V. Sychev, and A. E. Sheindlin. 14, 266 (1969) [185, 316 (1969)]

On the Reliability of Stabilized Superconducting Magnetic Systems. (E) V. V. Sychev, V. B. Zenkevich, M. G. Kremlev and V. A. Al'tov. 14, 911 (1970) [188, 83 (1969)]

Consideration of Crystalline Structure in the Theory of Superconductivity. (T) E. E. Tareeva. 14, 1089 (1970) [189, 299 (1969)]

Dimensional Effect in Magnetization of Hard Superconductors. (E) B. G. Lazarev and O. N. Ovcharenko. 14, 1223 (1970) [189, 1218 (1969)]

Composite Superconductors Obtained from Alloys by the Phase Substitution Method. (E) E. M. Savitskii, B. P. Mikhailov, and V. V. Baron. 14, 1229 (1970) [189, 1226 (1969)]

SURFACE PROPERTIES

Effect of Reversible Friction on Dislocation and Vacancy Density in the Surface Layer of a Metal. (E) V. D. Evdokimov and G. E. Movsesov. 14, 491 (1969) [186, 302 (1969)]

Anomalous Plasticity of the Surface Layers of Semiconducting Crystals. (T) V. P. Alekhin, O. V. Gusev, V. I. Trefilov, and M. Kh. Shorshorov. 14, 894 (1970) [188, 548 (1969)]

Electric Field at the Electrode Surface at the Cathode Spot of an Arc Discharge. (T) I. I. Beilis, G. A. Lyubimov, and V. I. Rakhovskii. 14, 897 (1970) [188, 552 (1969)]

Electrical Resistance of Surface Layers of Metals and the Mechanism of Seizure. (E) B. I. Kostetskii and O. V. Shul'ga. 14, 908 (1970) [188, 80 (1969)]

Low-Temperature Plastic Deformation of the Surface of Silicon Single Crystals. (E/T) V. P. Alekhin, O. V. Gusev, Yu. N. Petrov, V. I. Trefilov, and M. Kh. Shorshorov. 14, 917 (1970) [188, 326 (1969)]

THERMAL PROPERTIES AND HEAT TRANSFER

Temperature Dependence of the Rupture Lifetime of Solids. (T) R. L. Salganik. 14, 221 (1969) [185, 76 (1969)]

Heat of Ordering for Ni_2Cr Alloy. (E) E. Z. Vintaikin, V. P. Itkin, B. M. Mogutnov, and G. G. Urushadze. 14, 263 (1969) [185, 313 (1969)]

The Second Homogeneous Imperfect-Thermal-Contact Boundary-Value Problem. (T) A. M. Abasov. 14, 315 (1969) [185, 1010 (1969)]

A Nonstationary Problem of Thermal Conductivity in a Two-Layer Cylinder. (T) A. S. Umanskii, V. M. Dubner, and Yu. A. Gorshkov. 14, 428 (1969) [186, 66 (1969)]

Effect of Tunneling on the Efficiency of Thermoelectric Devices. (T) N. S. Lidorenko, V. A. Andriyako, L. D. Dudkin, É. L. Nagaev, and O. M. Narva. 14, 591 (1969) [186, 1295 (1969)]

Heat Transfer in a Plasma Due to the Buildup of Instability of Nonconducting Electrons. (T) B. B. Kadomtsev and O. P. Pogutse. 14, 881 (1970) [188, 311 (1969)]

The Kinetics of Disintegration under Shock Heating. (E /T) V. M. Finkel', V. N. Gurarii, and N. I. Alyushina. 14, 927 (1970) [188, 567 (1969)]

ULTRASONICS

Rate of Propagation of Ultrasound in Argon at Pressures up to 4 Kbars and Temperatures from 25 to 200°C. (E) L. L. Pitaevskaya, A. V. Bilevich, and N. B. Isakova. 14, 150 (1969) [184, 1315 (1969)]

Effect of Ultrasound upon the Formation of High-Energy Particle Tracks in Liquid-Hydrogen Bubble Chambers. (E) V. A. Akulichev, L. R. Gavrilov, V. G. Grebinnik, V. A. Zhukov, G. Liebman, A. P. Manych, Yu. I. Rudin, L. D. Rozenberg, and G. I. Selivanov. 14, 1173 (1970) [189, 973 (1969)]

WAVE PROPAGATION

Experimental Determination of the Velocity of Propagation of Long Centrifugal Waves Formed in Translational-Rotary Liquid Flow. (E) I. I. Novikov. 14, 17 (1969) [184, 313 (1969)]

General Waveguide Theory and the Ultimate Resolving Power of Multiple-Ray Spectrum Analyzers. (T) L. N. Deryugin and A. V. Chekan. 14, 123 (1969) [184, 807 (1969)]

Transport of Heat in a Plasma along a Magnetic Field (Replacement Wave). (E/T) A. A. Ivanov, L. L. Kozorovitskii, and V. L. Rusanov. 14, 126 (1969) [184, 811 (1969)]

Weak Shock Waves in a Thermo-Relaxing Medium. (T) G. M. Arutyunyan. 14, 334 (1969) [185, 778 (1969)]

"Calorimetric" Measurement of the Electron Temperature of a Plasma in a Collisionless Shock Wave. (E/T) G. E. Smolkin, E. A. Striganova, and G. V. Sholin. 14, 343 (1969) [185, 788 (1969)]

Motion of a Medium with Ultrarelativistic Velocities in the General Theory of Relativity. (T) K. P. Stanyukovich. 14, 353 (1969) [185, 1030 (1969)]

Diffraction of Elastic Waves by an Infinite Row of Circular Cylinders. (T) V. T. Golovchan and A. N. Guz'. 14, 503 (1969) [186, 286 (1969)]

Variational Method for Solving a Wave-Propagation Boundary-Value Problem. (T) V. I. Koroza. 14, 526 (1969) [186, 795 (1969)]

Experimental Investigation of Nonequilibrium Processes behind a Shock Wave in Air and Nitrogen by the Shadow Method. (E) L. A. Vsil'ev, I. V. Ershov, and S. S. Semenov. 14, 553 (1969) [186, 1041 (1969)]

Forced Scattering on Surface Waves. (T) V. K. Gavrikov, A. V. Kats, and V. M. Kontorovich. 14, 564 (1969) [186, 1052 (1969)]

Consideration of the Piezoelectric Effect in the Theory of Elastic Waves for Crystals of Different Symmetries. (T) V. N. Lyubimov. 14, 567 (1969) [186, 1055 (1969)]

Long Unsteady Waves in a Rotating Basin. (T) B. I. Sebekin. 14, 641 (1970) [187, 53 (1969)]

The Calculation of Reflection and Transmission Coefficients of Electromagnetic Waves for a Spherically Laminated Anisotropic Layer by the Method of Impedance and Field Scalings. (T) P. E. Krasnushkin and R. B. Baibulatov. 14, 841 (1970) [188, 300 (1969)]

Nonlinear Excitation of Drift Waves in a Nonhomogeneous Plasma. (T) B. B. Kadomtsev and O. P. Pogutse. 14, 863 (1970) [188, 69 (1969)]

The Formation of a Surface Wave near a Rough Interface between Two Media. (T) Yu. K. Alekhin. 14, 1095 (1970) [189, 499 (1969)]

The Velocity of a Wave Front. (T) Yu. E. Murakhver. 14, 1161 (1970) [189, 1193 (1969)]

Stochastic "Heating" of a Nonlinear Wave. (T) N. N. Filonenko. 14, (1970) [189, 1208 (1969)]

X RAYS

X-Ray Kα Emission Band of Carbon in the Monocarbides of Transition Metals Belonging to the Fourth and Fifth Groups. (E) E. A. Zhurakovskii. 14, 168 (1969) [184, 1317 (1969)]

Synthesis and X-Ray and Thermal Studies of Potassium Rare-Earth Tungstates, $KLn(WO_4)_2$, Ln = Rare-Earth Element. (E) P. V. Klevtsov and L. P. Kozeeva. 14, 185 (1969) [185, 571 (1969)]

Secondary Maxima in the Scattering of X Rays by Finely Divided Polycrystals. (E/T) I. V. Smushkov and V. F. Tkachenko. 14, 250 (1969) [185, 79 (1969)]

Detecting Soft X Radiation with Electron-Optical Converters. (E) V. A. Bryzgunov, M. M. Butslov, and M. A. Mokul'skii. 14, 338 (1969) [185, 782 (1969)]

Model of a Three-Dimensionally Modulated Complex for Explaining X-Ray Diffraction Patterns with Satellites. (T/E) Yu. D. Tyapkin, M. N. Georgiev, and M. V. Dzhibuti. 14, 409 (1969) [186, 316 (1969)]

X-Ray Emission of the Kα Band of Nitrogen in the Group IV, V, and VI Transition Metal Nitrides. (E) E. A. Zhurakovskii and N. N. Vasilenko. 14, 710 (1970) [187, 562 (1969)]

Small-Angle X-Ray Scattering from Neutron-Irradiated Lithium Fluoride. (E) I. V. Telegina and E. V. Kolontsova. 14, 714 (1970) [187, 566 (1969)]

Characteristics of Diffuse Scattering of X Rays at the Zone Stage of Aging of Alloy AlAg. (E/T) G. V. Kleshchev, A. V. Sheinkman, D. V. Shumilov, and A. E. Vanin. 14, 796 (1970) [187, 1261 (1969)]

X-Ray Fluorescence of Rare-Earth Ions in $Y_3Al_5O_{12}$ Crystals. (E) Yu. K. Voron'ko, B. I. Denker, V. V. Osiko, A. M. Prokhorov, and M. I. Timoshechkin. 14, 998 (1970) [188, 1258 (1969)]

X-Ray Study of the Structure of Liquid Lead. (E) A. V. Romanova and B. A. Mel'nik. 14, 1084 (1970) [189, 294 (1969)]